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Woody Plant Materials Suitable for Landscape Planting in Maine

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WOODY PLAND MATERIALS

SUITABLE FOR LANDSCAPE PLANTING

IN MAINE

A THESIS

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INTRODUCTION

The aim of this study has been to determine the full range of woody plant materials suitable for landscape planting in Maine. Essentially, the survival of a perennial plant out-of-doors in this State is determined by its hardiness. It is desirable not only to know that a particular plant exists or is hardy at a given place, but also to know over what area the plant may reasonably be expected to be thrifty. This immediately suggests dividing the State into climatic or plant zones. Such a zoning of the State is undertaken in this paper and the plant material is recommended for each zone in which it is found to be hardy, with the thought that such definite planting information will be useful to the nurserymen and the home gardeners of the state.

A work of this nature cannot be final, but it is hoped that this list will encourage further investigation, primarily in recording data on the loss of plant materials during test winters and the addition to this list of many hardy ornamental plants common in the nursery trade but not now observed to be growing in Maine, and those even now growing in some remote location within the State but undisclosed by this survey.

REVIEW OF LITERATURE

On Plant Material

Little previous work has been done in listing the ornamental plants useful in Maine. In 1875 Lamson-Scribner (25) treated in the most general way only a few of the woody plants. In 1898 Munson (30) discussed some of the useful ornamental plants, but from the present study it is obvious that his observations were not in line with those reported in this study. This was the latest general publication of a horticultural nature, though recently Miss Coburn (7) has written popular articles on the trees of Coburn Park, Skowhegan.

The botanical literature is more extensive and lists of the flora of the State have been compiled from time to time. Unfortunately from the standpoint of the present work, the introduced ornamental plants were usually omitted from such studies. They are extremely valuable, nevertheless, in determining the natural range of our woody plants, of which a great many have decided ornamental value. The State has two regions, Mount Desert Island and Mt. Katahdin, that are of special interest to the botanist. The literature for these two regions will be treated separately.

In 1861 Holmes (21) and Goodale (15), in connection with the Maine scientific survey, traveled extensively over the State and recorded the flora that they observed. Their writings are of historic interest at least, for Holmes suggested that the Aroostook area might be divided by an east-west line into two areas based upon the presence

of two distinct plant regions. From observations along the Penobscot River, Goodale suggests the possibility of "the division of the route into floral sections."

Goodale (16), after completing his field work, published a catalog of flowering plants, and about the same time Lang (26) reported trees and shrubs common at Waldo county. Fernald (14), in the nineties, published the Portland Catalog of Maine Plants. Hill's (20) work of 1919 on the flora of Penobscot Bay region makes available in a recent publication the previous observations on the flora of that area.

There is also available in Miss Coburn's (6) recent paper on the plants found about Attean Pond near Jackman, a rather complete picture of the native flora of the northwestern part of the State. Two writers who have contributed and are still adding to our knowledge of the flora of Maine are Arthur H. Norton, curator of the Portland Society of Natural History, and Professor M. L. Fernald of the Gray Herbarium. In addition, short articles on the flora of Maine appear at frequent intervals in the Maine Naturalist, Rhodora, and other botanical publications.

No doubt this large source of literature will be compiled to some extent upon the completion of the List of New England Plants, a monumental piece of work which is being published in sections by Weatherby (40) and his committee. This will take years to complete. The plants are listed as to their occurrence in each of the six New England States so that the complete list will contain a catalog of the plants of Maine.

Mt. Katahdin has been of particular interest botanically because of its alpine flora. Harvey (18), in his ecological discussion of the mountain, includes the literature previous to 1902. Since then many articles have been written on the flora of the mountain, but, inasmuch as they discuss plants having little present landscape value, they will not be further considered here.

Mount Desert Island has received special consideration by botanical writers. Rand and Redfield (31) at an early date published a check list of its flora. This has been brought up to date by Stebbins' (37) additions in 1929 to the Rand and Redfield flora of the Island. Moore and Taylor (29) recently published a most interesting ecological treatment of the Island's flora and its environment. Wherry (41) is the author of a popular book on the wild flowers of the Island.

On Hardiness

The literature on hardiness of woody plants has been reviewed by Dorsey and Bushnell (13). An extensive treatment of the responses of fruit trees to climatic differences may be found in the work of Chandler (5). From the former paper certain generalizations will be presented. Test winters are of periodic occurrence, some being more or less local in extent; others, as that of 1917-1918, quite general. Certain cultural practices favor winter injury to plants; others prevent it. For example, pruning, when it is followed by late growth, invites injury from severe winter temperature. Because of the deeper freezing of dry soil, dry autumn weather is a forerunner of severe root injury.

Alternate freezing and thawing, with attendant root injury, may be more damaging in a dry soil than in one that is better watered. Such conditions of plant nutrition and soil moisture as lead to timely hardening or maturity of the wood make them resistent to cold. Mulches and any kind of ground cover about woody plants modify the depth of freezing. Windbreaks likewise have a bearing upon the survival of plants. Evidence is cited that snow affords protection not only to the roots but also to parts above ground not covered by the snow.

Plants show marked differences with respect to the growth activity which may be stimulated by warm periods that occur in winter. Such periods are of more frequent occurrence in certain areas than in others. Intimate relationship between dormancy, the rest period, and hardiness has been established and is reviewed by the writers cited.

Concerning adaptation and hardiness from the genetic point of view, investigations indicate that plants grown from seeds collected from individuals of a species which have become established in the northern part of its natural range, appear to inherit factors for hardiness that are not possessed by plants grown from seeds which were secured from plants of the same species that have become established in the southern portion of its natural range. Dorsey and Bushnell summarize the conception of adaptation by saying, "It is apparent that a fundamental distinction can be made between a species and a horticultural variety with reference to adaptive adjustments. Winter killing, cultural methods, and differences in the rest period all take their place in relation to fundamental survival differences."

It is outside the province of the present study to deal at greater length with the causes of winter killing or the theories concerning what takes place within the tissues. It should be obvious from the foregoing discussion that the survival of ornamental species in man-made gardens, even more than in natural environments in Maine, is dependent not only upon climate but on source of plants, nature of soil, abundance or scarcity of moisture, protective covering, culture, and doubtless still other variables.

It seems desirable to mention two bibliographies which have conveniently brought together the available literature on hardiness as well as other considerations of the influence of weather on crops. Rehder's (33) publication covers the literature previous to 1900 and Hannay (17) compiles the literature from 1900 to 1930.

On Climate

The climate of Maine was early treated by Henry (19), as a part of a general consideration of the climate of the United States, and at a later date by Day (12) who, in assembling climatic data for 106 sections of the country, treated Maine as section 106. Although Weather Bureau summaries were published in 1910 and 1920, none was issued for the decade ending in 1930. So in the present study recourse has been had to the data published in the report of 1920.

Based upon the 1910 Summary, the Weather Bureau prepared various zoned maps of important climatic features and published them in the

several sections of the Atlas of American Agriculture. Ward (39) has conveniently discussed the temperature charts available previous to 1921.

On Zoning

Different investigators have divided North America into zones of similar growing conditions. In many cases the prevalent vegetational type as determined by the student of ecology conforms with the area or zone established by the student of climatology. In general, though, the two do not correlate to such an extent that one may be used as an index of the other. Livingston and Shreve (27) made an attempt to correlate the vegetation of the United States with various climatic conditions of temperature and moisture. In general they found that meteorological data were either too fragmentary or of the improper kind because of the method of recording or classifying the data. Livingston and Shreve conclude "that very little real advance in this field is to be looked for until many new methods have been devised and tested."

Merriam (28) in 1898 divided North America into three regions according to the distribution of plants and animals. These regions, the Boreal, Austral and Tropical, were further subdivided so that the northern part of Maine, the area north of a line drawn roughly from Bethel through the Moosehead Lake region to the south of Houlton, is in the Canadian zone of the Boreal region, and the southern and eastern part is in the Transition zone, a zone composed of an inter-blending of typical Boreal and Austral elements.

In 1917 Shreve (36) established a vegetational scheme for the United States in which he divided the country into vegetational zones based on rainfall - evaporation ratios. He places all but that part of Maine from Brunswick westward in the Northeastern Mesophytic Evergreen Forest. The strip from Brunswick to Yarmouth and westward is placed in the Northeastern Evergreen Deciduous Transition Forest, while the southern tip below this Yarmouth-westward line and the Coast line eastward from Brunswick, terminating beyond Mount Desert Island, is included in the Deciduous Forest.

Day (11) in 1911 published a zoned map of the average length of the growing season, which has been superseded by a map presented by Reed (32) in the section on frost and the growing season in the Atlas of American Agriculture. That section from Reed's chart representing Maine has been reproduced as Figure 2, as it served as a base in the study which lead to the establishment of zones in this paper.

In 1921 Livingston and Shreve (27) zoned the United States into areas based on the length of the average frostless season. Their map differs considerably from that of Reed, though its zones are very similar to those established in this study.

Rehder (34), in order to show the range of plants mentioned in his manual, established a relief map of the United States and adjacent Canadian area on which he differentiates eight climatic zones characterized by differences of 5 degrees in the lowest mean temperature of the coldest month. This classification, Rehder explains, is only general, as there are many factors other than winter temperature which will influence the

hardiness. In Maine he has established four zones: Zone II, that section of the State north of a line extending in general from the northwest corner through Moosehead Lake to Mars Hill; Zone III, the section which is south of this line to a line from Bethel to Calais; Zone IV, all of the State south and east of the Bethel-Calais line except the southern tip; Zone V, the southern tip.

The foresters have divided the United States into forest regions based upon a predominance of certain typical forest trees. For a detailed consideration of the local forest regions, the work of Moore and Taylor (29) should be consulted. Dana (10) divides Maine into two regions. The White Pine region consists of that area to the south of a line extending from near Fryeburg northeastward to the Penobscot River near Mattawamkeag and then south so as to include the east bank of the River. The remainder of the State is in the Spruce and Northern Hardwood region.

METHOD OF PROCEDURE

The Field Survey

As a result of conferences with men familiar with horticulture in Maine, certain stations covering the entire climatic range of the State were selected for their abundance of ornamental plant material. Thirty-four stations were visited during the summers of 1929 and 1930, and through the field survey method a complete check was made of the ornamental woody plant materials found in or about each station. During the survey certain additional regions were discovered which were rich in ornamental plant materials. These were included so that data are available from forty-one stations.

Identification of the Specimens

Much of the common material could be identified readily from field characters. Twigs, leaves and such other material useful for identification were collected from unknown plants and preserved for identification. The winter and the foliage keys of Curtis (9) proved useful in such identifications. Other useful references were those of Rehder (34), Robinson and Fernald (35), Bailey (2, 3, and 4), Hottes (22, 23, and 24), and Trelease (8).

In all cases Rehder's Manual (34) was used as the authority in determining disputed specimens. Certain specimens were sent to Prof. R. W. Curtis at Cornell University for identification.

In a few groups where the species or varieties are similar except for color of flower or certain peculiarities of the flower structure, as in the Weigela and Kerria, it was not possible to distinguish the species or varieties from an observation when the plant was not in flower. In these cases the variations are not given recognition in the check list.

Determination of Zones for the State

After carefully considering the various factors involved in determining the hardiness of woody plants, and influenced to a great extent by Livingston and Shreve's (27) exhaustive work on methods of determining vegetational zones, it seemed most advisable to use the average length of the growing season (number of days between the last killing frost of the spring and the first killing frost of autumn) as a basis for zoning the State. These men in their general conclusion state:

"Special emphasis should be placed on the length of the average frostless season as an index of temperature duration. It has proved to be of great value, not only as a temperature index per se, but also as a duration factor for intensity indices of both temperature and moisture conditions. This promises to be one of the most useful temperature indices for use in ecological climatology, although it has not yet attracted the attention that it deserves."

Furthermore, information on the length of the growing season, which is available from seventeen stations, covers the State as thoroughly as that for any other temperature basis.

Writers on the subject of plant hardiness establish clearly the importance of the duration of low temperature in determining the

damage done by severe cold. A plant which might easily withstand 30° below zero Fahrenheit for a short period, might succumb should this cold continue for a day or more. A determination of the duration factors for the seven Maine stations recording temperatures for the Weather Bureau would necessitate an extensive study. It would be necessary to work over the original records, and it is doubtful whether any but the official stations at Portland and Eastport, both on the coast, has recorded anything but daily or twice daily readings. Such readings do not reveal the duration of a given temperature condition.

When considering the absolute minimum temperatures, there is only a variation from -21°F. at Portland or Bar Harbor to -36°F. at Orono, Greenville, and Presque Isle. Considering mean annual temperature, the range is from 46.3°F. at Portland to 39.2°F. at Greenville and 39°F. at Presque Isle. The mean monthly temperature for the coldest month is 22.4°F. at Portland, 21.4°F. at Bar Harbor, 12.4°F. at Greenville, and 10.5°F. at Presque Isle. The spread of the frost-free days is much more pronounced, from 157 days at Portland to only 104 days at Presque Isle. These temperature conditions occurring at the various weather stations where observations have been made are presented in Table I.

Since Livingston and Shreve (27) concluded that the length of the average frostless season was an important temperature index, other temperature indices appearing inadequate, and since these records of the frost-free period are more complete than others, not only for Maine but for the other areas with which the plantsman might be concerned, this basis for zoning the State was adopted.

TABLE I

Climatic Data Reported by the Weather Stations in Maine
(See Figure 1 for the location of stations)

Station	Length of the Average Frost-less Season	Absolute Minimum Temp.	Mean Annual Temp.	Mean Temp. Coldest Month
	Days	°F	°F	°F
Portland	157	-21	46.3	22.4
Lewiston	150	-24	44.0	18.0
Bar Harbor	150	-21	44.0	21.4
Eastport	176	-23	41.5	20.5
Cornish	112	-19	44.0	19.0
North Bridgton	138	-30	44.6	18.8
Farmington	122	---	----	----
Gardiner	148	-30	45.0	18.0
Winslow	135	---	----	----
Fairfield	134	-37	43.0	11.0
Orono	146	-36	43.4	17.8
Rumford Falls	128	-29	43.0	16.0
Flagstaff	116	---	----	----
Mayfield	128	-22	42.0	16.0
Millinocket	127	---	----	----
Greenville	107	-36	39.2	12.4
Presque Isle	104	-36	39.0	10.5

TABLE II

Length of the Average Frostless Season

Station	Length of Record	Length of Average Frostless Season
	Yrs.	Days
Portland (106)	50	157
Lewiston (L&S)	24	150
Bar Harbor (106)	35	150
Eastport (106)	47	176
Cornish (L&S)	15	112
North Bridgton (106)	27	138
Farmington (L&S)	16	122
Gardiner (L&S)	16	148
Winslow (L&S)	11	135
Fairfield (L&S)	--	134
Orono (106)	47	146
Rumford Falls (L&S)	15	128
Flagstaff (L&S)	5	116
Mayfield (L&S)	18	128
Millinocket (L&S)	6	127
Greenville (106)	15	107
Presque Isle (106)	11	104

Compiled from Section 106, Summary by Sections, 1920, and augmented by data from Table 2, Livingston and Shreve.

TABLE III

Absolute Minimum Temperature

Station	Length of Record	Absolute Minimum Temp.	Month Occuring
	Yrs.	oF	
Portland (106)	46	-21	Dec.
Lewiston (Q)	10	-24	Feb.
Bar Harbor (106)	32	-21	Dec.
Eastport (106)	47	-23	Feb.
Cornish (Q)	10	-19	Dec.
North Bridgton (106)	27	-30	Feb.
Gardiner (Q)	10	-30	Jan.
Fairfield (Q)	10	-37	Dec.,Feb.
Orono (106)	35	-36	Dec.
Rumford Falls (Q)	10	-29	Jan.
Mayfield (Q)	10	-22	Jan.
Greenville (106)	14	-36	Dec.,Jan.
Presque Isle (106)	11	-36	Feb.

Compiled from Section 106, Summary by Sections, 1920, and additional data as reported in Bulletin Q, 1906.

TABLE IV

Mean Annual Temperature

Station	Length of Record	Mean Annual Temp.
	Yrs.	°F
Portland (106)	46	46.3
Lewiston (Q)	19*	44.0
Bar Harbor (106)	20	44.0
Eastport (106)	47	41.5
Cornish (Q)	31*	44.0
North Bridgton (106)	20	44.6
Gardiner (Q)	10*	45.0
Fairfield (Q)	18*	43.0
Orono (106)	20	43.4
Rumford Falls (Q)	10*	43.0
Mayfield (Q)	19*	42.0
Greenville (106)	15	39.2
Presque Isle (106)	11	39.0

*Estimated

Compiled from Section 106, Summary by Sections, 1920, and additional data as reported in Bulletin Q, 1906.

TABLE V

Mean Temperature of the Coldest Month

Station	Length of Record	Mean Temp. of Coldest Month	Month Occurring
	Yrs.	°F	
Portland (106)	46	22.4	Jan.
Lewiston (Q)	19*	18.0	Jan.
Bar Harbor (106)	20	21.4	Feb.
Eastport (106)	47	20.5	Jan.
Cornish (Q)	31*	19.0	Jan.
North Bridgton (106)	20	18.8	Jan.
Gardiner (Q)	10*	18.0	Jan.
Fairfield (Q)	18*	11.0	Jan.
Orono (106)	20	17.8	Jan.
Rumford Falls (Q)	10*	16.0	Jan.
Mayfield (Q)		16.0	Jan.
Greenville (106)	15	12.4	Feb.
Presque Isle (106)	11	10.5	Jan.

*Estimated

Compiled from Section 106, Summary by Sections, 1920, and additional data as reported in Bulletin Q. 1906.

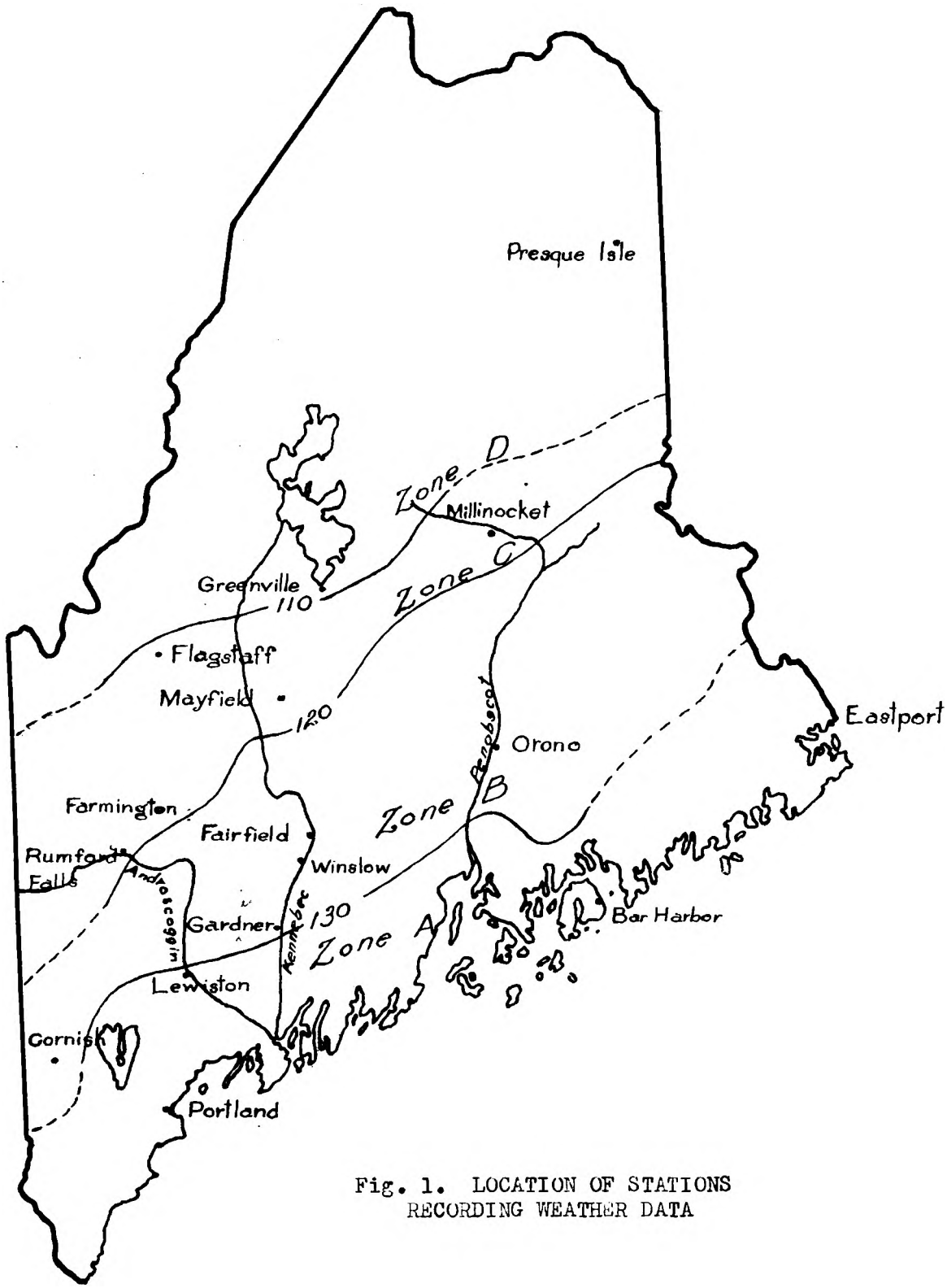

Fig. 1. LOCATION OF STATIONS RECORDING WEATHER DATA

Records of the length of the frost-free period are available, either directly computable from the Summaries of the weather data for various states, or from the very exhaustive Table 2 of Livingston and Shreve. Their data are computed from the Summary by Sections (12) and Henry's Bulletin Q (19). Therefore it is possible to compare the length of the growing season in the several zones of Maine with various areas of the northern United States having similar climatic conditions. A plantsman might predict that a plant which had grown satisfactorily at a trial ground in Minnesota might thrive in certain areas within this State.

The United States Department of Agriculture have published a chart showing the average number of days without killing frost (32). This is a relief map upon which lines are drawn connecting points having equal numbers of frost-free days. The lines are drawn for each ten-day increment and are very irregular because of the influences of altitude, proximity to bodies of water and other less pronounced climatic factors. These lines were carefully plotted on a map of Maine which appears as Figure 2. The available data for frost-free periods (Table I) were plotted for seventeen stations. It was found that in many cases these lines were not correctly located although they did follow the general trend within the State. It became necessary to correct the traverse of these lines by taking into consideration the observed data for the various stations, the moderating influence of large bodies of water, and the altitude.

Furthermore it was found that six zones thus established by using

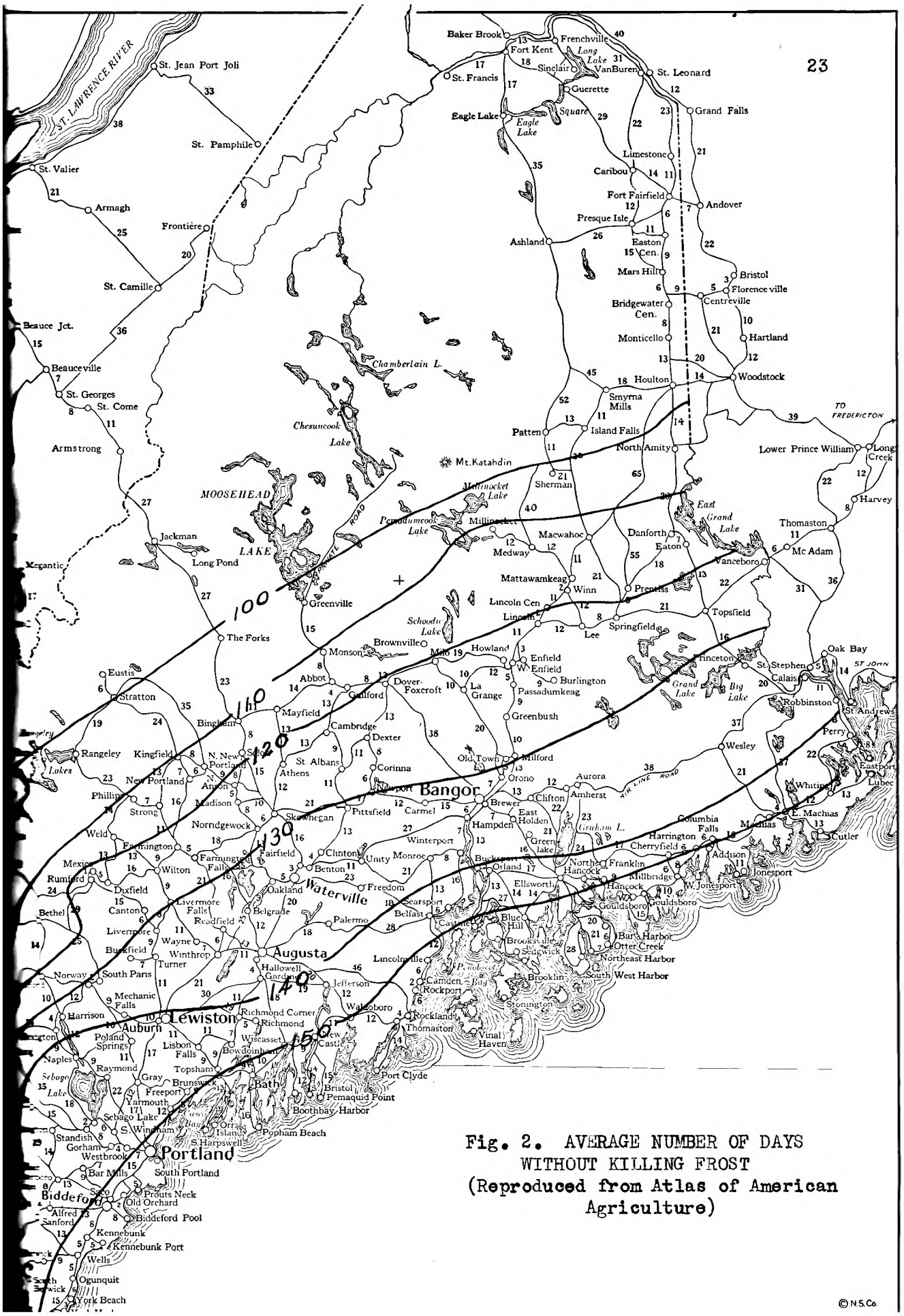

Fig. 2. AVERAGE NUMBER OF DAYS WITHOUT KILLING FROST (Reproduced from Atlas of American Agriculture)

lines representing ten-day increments were not necessary in this study. The intervals were changed to twenty-day increments which established four zones, the boundaries of which are determined by the lines demarcating periods of 150, 130, and 110 frost-free days. Figure 3 shows the exact location of these zones.

Two conditions seriously hampered the determination of the paths of the lines. One was the lack of a reliable contour map of the State, in which general elevations would serve as a guide. The second was the insufficiency of weather information, since in proportion to the area of the State, which is as large as the rest of New England, Maine has only a very few stations recording temperature data. For example, the station at Presque Isle serves for the large area of Aroostook with its mountainous condition in the west and the moderating influence of the St. John River in the east. Except for Eastport, on the coast, there are no weather data for the vast area east of the Penobscot River. The area near the Rangeley Lakes and Moosehead Lake is insufficiently covered and there is much need of more detailed information in the southwest corner of the State where the adjacent White Mountains, with air drainage from their colder summits, has a pronounced influence on the local climate within the area. Thus, Cornish, situated on a low, relatively flat land in this latter area, has only 112 frost-free days whereas surrounding sections, which are indicated on the map of frost-free days, have from 130 to 140 days without frost.

It was thought at the beginning of this study that, through the field survey in which the established woody flora of the various selected stations was to be determined, information would be secured which would

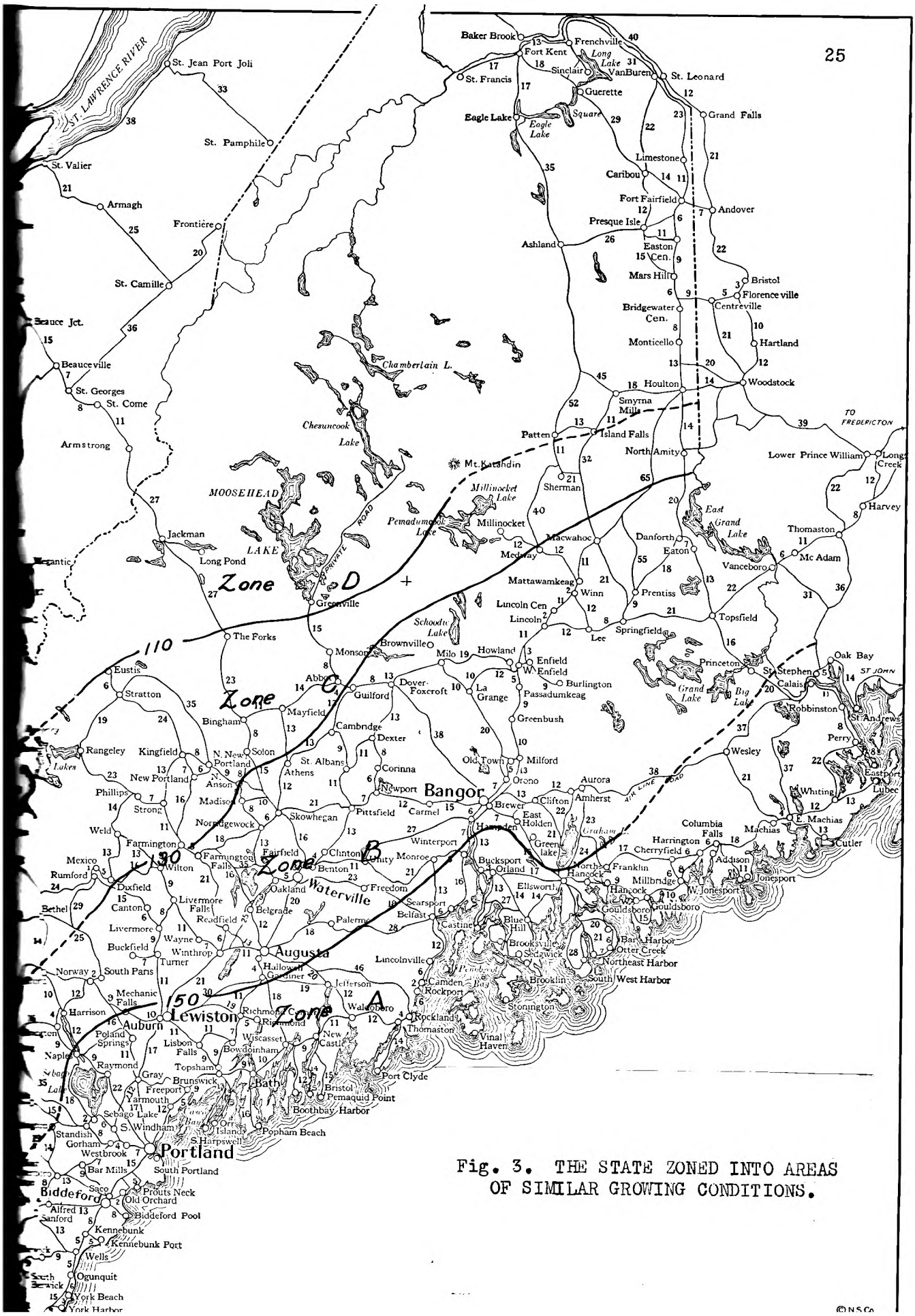

Fig. 3. THE STATE ZONED INTO AREAS OF SIMILAR GROWING CONDITIONS.

aid in the establishment of zones. It was soon found, however, that the number of species and varieties planted at certain stations was very meager. Furthermore, local climatic peculiarities, such as heavy snow or wind protection, often gave inconsistent information. As an illustration,the presence of certain typical plants, such as Spiraea prunifolia, makes it possible to see that Sanford should be included in Zone A.

PRESENTATION OF DATA

The Composition of the Check List

The check list is a list of the woody plants suitable for landscape planting in the several climatic zones of Maine. The plants are arranged alphabetically by genera, and by species within the genera, with varieties included under their respective species.

The list contains the names of all woody plants hardy in Maine as determined by field survey or reported by authoritative persons or those reported in the literature or of which there are herbarium specimens in the herbarium of the Botany Department of the University of Maine or in the State of Maine section of the herbarium of the Portland Society of Natural History. The literature and herbaria are very useful in expanding the range of materials found in this survey. Many useful native plants are included that might otherwise have been omitted from some of the zones in which they would grow, simply because they had not been brought from the wild to the dooryards of the residences in those villages chosen as stations in the field survey.

The scientific and common name used on the right of the list and adopted as standard for sublisting in other sections of this report, are the names approved by the American Joint Committee on Horticultural Nomenclature as published in Standardized Plant Names (1) which has been accepted as the "official code" by the leading nurseries of the country. Opposite this is another scientific name used by Alfred Rehder

in the Manual of Cultivated Trees and Shrubs (34), and based on the International Code, which has been used as botanical authority for the identification of the plant material. In some cases where the exact botanical species could not be determined, as in certain members of the genus Populus, the material has been assembled under the common nursery nomenclature for the group. In such cases the botanical reference is given of the description of the species which is typical of the group. Where this has been done the botanical reference is enclosed by parentheses. It will suffice to say that in many cases the authorities are in dispute as to the scientific identity of certain groups whereas the nurseries include them, because of their close similarity, under one group and handle them as one species. For example, the Carolina poplar (Populus eugenei) of the nursery trade may include two or more botanical species or varieties.

In working with woody plant materials from the standpoint of their value in ornamental horticulture, one is confronted with the problem of deciding whether everything woody, though some have little ornamental value or are so scarce that it is impossible to secure them in the ornamental trade, should be included. For instance, many of our alpine shrubs found only on Mt. Katahdin or certain of the vast multitude of species and varieties of Ribes (currants) and of Rubus (brambles) might well be omitted. It has, therefore, become necessary to select a standard for woody plants to eliminate from the list, lest it become too cumbersome, those of no ornamental value. Rehder's Manual, since it includes all the woody plants of the northeast has been adopted

as a standard for the determination of what shall be called woody. In the introduction, Rehder defines his selection thus:

> "the term trees and shrubs is here taken in a wide sense, so as to include not only woody vines, but also suffruticose plants, that is, plants of which only the lower part of the stems or branches persists and becomes woody, while the upper part dies back annually, or which have stems persisting for several years without becoming truly ligneous. The distinction between a suffruticose plant or subshrub and a perennial plant, however, is not always perfectly clear and definite, but in doubtful cases plants only slightly woody have been included rather than excluded, particularly if they belong to a genus or family otherwise not represented."

This elimination is made difficult by the lack of any check list of ornamental plants for northern New England. Omission has been made of most of those woody plants not mentioned by Hottes in The Book of Trees (24), The Book of Shrubs (23), or A Little Book of Climbing Plants (22), or in Curtis' classified lists of woody plants (8), as these men are recognized authorities in the field of ornamental woody plants. In a few cases woody plants omitted by Hottes and Curtis have been included where they seem to merit a position in the landscape planting.

Following the name is a list of key numbers indicating the zones and stations within the zones where the plants have been found to be growing satisfactorily. The name of the town is given for those locations not covered by the stations. Since there are twenty-seven stations in Zone A and only two in Zone C, the number of times a plant is reported in a given zone is not an indication of the relative frequency a plant is used in a given zone. Likewise, the reader should not attempt to draw conclusions as to the plants that are very common from

those that are reported at many stations. The check list reports only the existence of well established plants and not their frequency at a given station. Often a single specimen would appear at each of the many stations in a zone so that the record would read as if it appeared frequently in the area, yet such occurrence would not justify the statement that it was "common" to the region. The zones are respectively lettered from A to D, extending from the warmer coastal Zone A to the colder climatic Zone D of northern Maine. Their extent is clearly indicated in Figure 3.

Certain trees and shrubs are recognized as wild throughout the State. Examples of this are sugar maple (Acer saccharum) or the speckled alder (Alnus incana). These were not often recorded in the field survey. The term wild is used to designate a woody plant that is reproducing itself by natural means whether native or naturalized. If the plants are commonly wild within the zone they are designated in the zone range by a capital (W) meaning wild throughout the zone. In other cases a plant may occur wild only in limited areas in the zone and this is indicated by a lower-case (w). Where it occurs wild about a given station (w) is used following the number of the station. A designation C w-1-3w means that the plant occurs wild only in certain areas, and is found at station 1, and is wild in the neighborhood of station 3 of Zone C; and C W-1-3 indicates that the plant is wild throughout Zone C and can be found at stations 1 and 3.

It may reasonably be considered that any tree or shrub found in a given zone will be perfectly hardy in all preceding zones since all alpine flora has been omitted. For example, a shrub found in Zone C will be adaptable to Zones A and B, which have less severe climate.

Graphic Explanation of Check List

Selections from the check list are analysed to bring out clearly the varied information which they contain.

(Letters in parentheses refer to key on the following page)

(a)Cladrastis lutea (c)486 (b)Cladrastis lutea K. Koch.
Yellow-wood

(d)A 10-(g)16-19-(i)b
(k)B 3-5

(l)Probably not hardy beyond Zone A.

Crataegus coccinea 366 (m)(Crataegus pedicellata Sarg.)
Thicket Hawthorn

A (e)W-11-(i)a-c
B W-7-b

Vibrunum prunifolium 805 Viburnum prunifolium L.
Blackhaw

A (f)w-4-(f)6w-8

Clematis jackmani 222 x Clematis Jackmani Th. Moore
Jackman Clematis (m)(C. lanuginosa x Viticella)

A 4-6-10-15-24
B 3-8-9
(j)C
D 2

Quercus palustris 169 Quercus palustris L.
Pin Oak

A 17-24
B 4-8-(h)Hinckley
C 2

Key

(a) Approved name as in Standardized Plant Names.

(b) Name used in Rehder's Manual.

(c) Page reference in Rehder's Manual.

(d) Zones in which plants occur. See Figure 3.

(e) Capital W, growing wild over the whole zone. The term wild refers to a plant that is reproducing itself by natural means whether native or naturalized.

(f) Lower-case w, growing wild only in certain locations in the zone, or when used with a number meaning that the plant is wild in the vicinity of that station.

(g) Numbers refer to the stations at which the plant was found growing satisfactorily. See list on page 34.

(h) Observed at this town which was not included in the field survey.

(i) Letters refer to herbaria where specimens were found which had been gathered from this zone, or to literature where the plant was reported as growing in this zone. Refer to list on page 35.

(j) Not observed or reported in this zone. In all cases where the plant is found hardy in a colder climatic zone, it is assumed in this study that the plant will thrive in the warmer zone even if not reported. (Alpine flora have been excluded from this list.)

(k) Any part in italics is on trial since the plant is not considered to be hardy and the specimen observed had not been growing long enough to prove its hardiness; or the report of herbaria or literature is questionable; or it exists as a plant but does not make its normal growth.

(l) Horticultural information for the plantsman.

(m) Parentheses enclose the name used in Rehder's Manual when there is doubt as to the exact botanical identity of the plant. In other cases where the plant is a hybrid, parentheses are used below the scientific name to enclose the names used to indicate its parentage.

Stations Visited in the Field Survey

ZONE-A

A-1 Wells-Ogunquit

A-2 Kennebunk Port

A-3 Kennebunk

A-4 Sanford

A-5 Biddeford Pool

A-6 Biddeford-Saco

A-7 Prouts Neck

A-8 Ram Island Farm (Cape Elizabeth)

A-9 Portland

A-10 Falmouth Foresides

A-11 Yarmouth (Hammond Estate)

A-12 Naples

A-13 Poland Springs

A-14 New Gloucester

A-15 Wiscasset

A-16 Nobleboro

A-17 Thomaston (Knox Arboretum only)

A-18 Camden

A-19 Belfast

A-20 Dark Harbor

A-21 Castine

A-22 Southwest Harbor

A-23 Seal Harbor

A-24 Bar Harbor

A-25 Winter Harbor

A-26 Machias

A-27 Calais

ZONE-B

B-1 Bridgton

B-2 South Paris

B-3 Augusta

B-4 Farmington

B-5 Skowhegan

B-6 Waterville

B-7 Bangor

B-8 Orono

B-9 Old Town

ZONE-C

C-1 Bethel

C-2 Rangeley

ZONE-D

D-1 Greenville

D-2 Houlton

D-3 Van Buren

Herbaria and Botanical Literature Reviewed

a. Herbarium of the Department of Botany, University of Maine.

b. Herbarium of the Portland Society of Natural History.

c. Rand, Edward L. and John H. Redfield. Flora of Mount Desert Island, Maine. John Wilson and Son, Cambridge. 1894.

d. Coburn, Louise H. Flora of Birch Island in Attean Pond. Rhodora 22:129-138. 1920.

e. Moore, Barrington and Norman Taylor. Vegetation of Mount Desert Island, Maine, and its environment. Brooklyn Bot. Gard., Memoirs, vol. III. 1927.

f. Norton, Arthur H. Botanical notes from the Milbridge region. Maine Naturalist 7:148-151. 1927.

g. Stebbins, G. L. Further additions to the Mt. Desert flora. Rhodora 31:81-87. 1929.

h. Lang, J. W. List of the trees and shrubs common at Waldo County. 18th Ann. Rept. Maine Bd. Agr. pp 247-249. 1873.

i. Hill, Albert F. Vascular flora of the Penobscot Bay region. Proc. Portland Soc. Nat. Hist. 3:part 2. 1919.

j. Hyland, Fay. Report of the trees and shrubs of Marsh Island. Unpublished survey, Dept. of Botany, Univ. of Maine.

CHECK LIST

Woody Plants that are Suitable for Landscape Planting in the Several Climatic Zones of Maine

ABIES - Fir

Abies balsamea 35 Abies balsamea Mill.
Balsam Fir

A W-1-5-7-17-22-24-b-c-e-h-i
B W-3-5-7-8-a-b-j
C W-1-2
D W-1-d

Abies concolor 36 Abies concolor Lindl. & Gord.
White Fir

A 1-4-6-9-10-13-24
B 3-5-7
C 1

Abies fraseri 35 Abies Fraseri Poir.
Fraser Fir

A
B 5

Abies homolepis 32 Abies homolepis Sieb. & Zucc.
Nikko Fir

A 8

Abies nordmanniana 34 Abies Nordmanniana Spach.
Nordmann Fir

A 24

Should have a protected location.

Abies veitchi 30 **Abies Veitchii Lindl.**
Veitch Fir

A
B 5

ACANTHOPANAX

Acanthopanax pentaphyllum 662 **Acanthopanax Sieboldianus Mak.**

A 2-6-8-9-10-13-21-22-24-25
B 3-7-8
C 2
D 1-2

ACER - Maple

Acer campestre 563 **Acer campestre L.**
Hedge Maple

A 10-11

Acer dasycarpum 576 **Acer saccharinum L.**
Silver Maple

A W-1-6-10-15-17-19-24-b-c-h
B W-5-7-8-a-b-j
C W-1-b
D W-b

Acer ginnala 568 **Acer ginnala Maxim.**
Amur Maple

A 1-2-3-9-11-14-21-24
B 5-9
C
D 1

Hottes says that this is frequently cataloged as a variety of A. tataricum and is then called the Siberian Maple.

Acer negundo Boxelder	577	Acer Negundo L.

A W-1-5-6-10-17-22-26-b
B W-5-7-8-a-b-j
C
D 2-3

Acer nigrum Black Maple	565	Acer nigrum Michx.

A h
B b

Acer palmatum Japanese Maple	570	Acer palmatum Thunb.

A 10-15-19-21-24
B 2-3

Acer palmatum ornatum Spiderleaf Maple	570	Acer palmatum Thunb. var. ornatum Nichols.

A 24

Acer pennsylvanicum Striped Maple	573	Acer pennsylvanicum L.

A W-17-22-23-24-b-c-e-h-i
B W-5-a-b-j
C W-2-b
D W-1-2-b-d

Acer platanoides Norway Maple	561	Acer platanoides L.

A 5-6-10-15-17-19-22-24
B 5-7-a-j
C 2
D 1-2

Acer platanoides 561 Acer platanoides L.
aureo-marginatum var. aureo-marginatum Pax.

A 16

Acer platanoides schwedleri 561 Acer platanoides L.
Schwedler Maple var. Schwedleri K. Koch.

A 6-10-13-19-22-24-27
B 3-4-5-6-7-8
C
D 2

Acer pseudoplatanus 566 Acer pseudoplatanus L.
Sycamore Maple

A 1-3-10-15-18-24-b

In England and Europe this tree is called Sycamore while in America the Sycamore means Platanus occidentalis.

Acer pseudoplatanus variegatus 566 Acer pseudoplatanus L.
var. variegatum West.

A 24

Acer rubrum 576 Acer rubrum L.
Red Maple

A W-1-6-10-17-19-22-24-26-b-c-e-h-i
B W-5-7-a-b-j
C W-2
D W-1-d

Acer saccharum 565 Acer saccharum Marsh.
Sugar Maple

A W-1-6-10-17-19-22-24-b-e-h-i
B W2-5-7-8-9-a-b-j
C W-2
D W-1-2-3-b-d

Acer saccharinum wieri 576 Acer saccharinum L.
Wier Maple var. Wieri Pax.

A 1-6-9-10-22-24-26-27
B 3-4-5-7-a-j
C 1
D 3

Acer spicatum 568 Acer spicatum Lam.
Mountain Maple

A W-1-17-19-22-24-26-b-c-e-i
B W-5-8w-a-b-j
C W-b
D W-1-2-b-d

Acer tataricum 568 Acer tataricum L.
Tatarian Maple

A 11

ACTINIDIA - Actinidia

Actinidia arguta 620 Actinidia arguta Miq.
Bower Actinidia

A 5-6-9-18-19-20-22-23-24
B 7-8
C
D 1

AESCULUS - Horsechestnut

Aesculus glabra 580 Aesculus glabra Willd.
Ohio Buckeye

A 19-24
B
C
D 1

Aesculus hippocastanum 579 **Aesculus Hippocastanum L.**
Horsechestnut

A 1-4-5-6-10-11-12-19-22-24-27-b
B 2-a-j
C 1-2
D 1

At many places in the State this tree appears to suffer severely from exposure so that if it is not protected from the prevailing winds they become very ragged and undesirable.

AKEBIA - Akebia

Akebia quinata 231 Akebia quinata Decne.
Fiveleaf Akebia

A 24

ALNUS - Alder

Alnus incana 147 Alnus incana Moench.
Speckled Alder

A W-17-b-c-f-h-i
B W-a-b-j
C W
D W-b-d

Alnus mitchelliana 144 (Alnus crispa Pursh.)
American Green Alder

A W-b-c-e-i
B W-a-b-j
C W-b
D W-d

Alnus rugosa 145 Alnus rugosa Spreng.
Hazel Alder

A W-b-h
B W-a-b

AMELANCHIER - Shadblow

Extremely hardy plants. It is very difficult to distinguish some of the species that are almost identical in growth habit.

Amelanchier canadensis 390 Amelanchier canadensis Med.
Downy Shadblow

A w-10-17-24-b-c-h-i
B w-3-9-a-b-j
C 2
D b

Amelanchier laevis 390 Amelanchier laevis Wieg.
Allegheny Shadblow

A W-17-22-24-b-i
B W-b
C W
D W-b-d

Amelanchier oblongifolia 389 Amelanchier oblongifolia Roem.
Thicket Shadblow

A W-17-24-b-c-e-f

Amelanchier stolonifera 389 Amelanchier stolonifera Wieg.
Running Shadblow

A W-17-b-f
B
C W-b
D W-b

AMORPHA - False-indigo

Amorpha fruticosa 502 Amorpha fruticosa L.
Indigobush

A 9-11-20-24

Dies back to ground in severe winters.

AMPELOPSIS

Often cataloged as Parthenocissus

Ampelopsis quinquefolia 610 Parthenocissus quinquefolia Planch.
Virginia Creeper

A W-1-2-4-5-6-10-13-15-18-19-22-23-24-26-27-b
B 3-4-5-7-8-a
C 1
D 1-2-3

Ampelopsis tricuspidata 611 Parthenocissus tricuspidata Planch.
Japanese Creeper

A 1-2-4-6-10-13-15-19-21-22-24
B 5-7-8-9
C 1-2

AMYGDALUS - Peach

Amygdalus persica 462 Prunus Persica Batsch.
Peach

A 1-4-6-15-b
B 2-9

ANDROMEDA - Bog-rosemary

Many plants are cataloged as Andromedas which should be called Oxydendron, Chamaedaphne, Leucothoe, Pieris, or Zenobia.

Andromeda glaucophylla 709 Andromeda glaucophylla Link.
Downy Bog-rosemary

A W-17-b-e
B W-b
C W-b
D W-b

Andromeda polifolia 709 Andromeda Polifolia L.
Bog-rosemary

A W-17-c
B W-a

ARALIA - Aralia

Aralia spinosa 664 Aralia spinosa L.
Devils-walkingstick

A 2-9-10-23-24-25-b
B 7

ARCTOSTAPHYLOS

Arctostaphylos uva-ursi 718 Arctostaphylos uva-ursi Spreng.
Bearberry

A W-6w-10-17-23-24-a-b-c-e-i
B W-a-b
C W-b

ARISTOLOCHIA

Aristolochia sipho 204 Aristolochia durior Hill
Dutchmans-pipe

A 1-4-5-10-12-15-18-19-20-22-24-26
B 3-4-5-6-7-8
C 1-2
D 1-2

ARONIA - Chokeberry

Often cataloged as Pyrus or Sorbus.

Aronia atropurpurea 385 Aronia floribunda Spach.
Purple Chokeberry

A W-7-17-b-i
B W-3-8w-a-b-j

Aronia melanocarpa 385 Aronia melanocarpa Elliott.
Black Chokeberry

A W-17-b-c-e-f-i
B W-a-b

ARTEMISIA - Wormwood

Artemisia absinthium 848 Artemisia Absinthium L.
Common Wormwood

A 8-26-27-b
B 9-b
C
D 1

AZALEA - Azalea

The botanists call these all Rhododendron but in the nursery trade the deciduous members of this group are called Azaleas. For a more complete discussion Wilson and Rehder's The Monograph of Rhododendrons and Azaleas issued by the Arnold Arboretum, Boston, should be consulted. Waugh recommends for general garden use: A. calendulacea, A. nudiflora, A. vaseyi, and A. viscosa.

Azalea calendulacea 698 Rhododendron calendulaceum Torr.
Flame Azalea

A 5-10-13-16-17
B 3
C
D 1

Azalea kaempferi 693 Rhododendron obtusum Planch.
Torch Azalea var. Kaempferi Wils.

A 6-8

Azalea mollis 697 (Rhododendron molle G. Don.)
Chinese Azalea

A 1-6-24

Azalea quinquefolia 695 Rhododendron quinquefolium Biss. & Moore.
Cork Azalea

A
B 8

Azalea vaseyi 696 Rhododendron Vaseyi Gray.
Pinkshell Azalea

A 1-8-17

Azalea viscosa 700 Rhododendron viscosum Torr.
Swamp Azalea

A W-8-10-17-24-b
B 3
C
D 1

Azalea yodogawa 693 Rhododendron yedoense Maxim.
Yodogawa Azalea

A 13-16

BERBERIS - Barberry

Berberis koreana 248 Berberis koreana Palib.
Korean Barberry

A 8-24

Large bushes show killing back of tips.

Berberis thunbergi 245 Berberis Thunbergii DC.
Japanese Barberry

A 1-5-6-7-8-10-12-15-17-18-21-22-24-26-27
B 3-4-5-6-7-8-9
C 1-2
D 1-2-3

Berberis thunbergi atropurpurea 245 Berberis Thunbergii DC.
Purpleleaf Japanese Barberry variety

A 1-6
B 8
C
D 1-2

Berberis vulgaris 249 Berberis vulgaris L.
European Barberry

A W-1-2-5-6-10-12-13-15-17-18-20-24-b-c-i
B W-3-5-7-8-9-a-b-j
C
D 1-2

Berberis vulgaris atropurpurea 250 Berberis vulgaris L.
Purple Barberry var. atropurpurea Reg.

A 1-2-5-6-10-13-20-26
B 3-5-7
C 1

BETULA - Birch

Betula lenta 137 Betula lenta L.
Sweet Birch

A W-11-b-c-h

Betula lutea 137 Betula lutea Michx.
Yellow Birch

A W-10-17-19-24-b-c-f-h-i
B W-5-8-a-b-j
C W-2
D W-1-2-b-d

Betula nigra 138 Betula nigra L.
River Birch

A
B
C lw

Betula papyrifera 141 Betula papyrifera Marsh
Canoe Birch

A W-1-6-10-17-24-a-b-c-e-i
B W-5-7-a-h-j
C W-2
D W-1-2-3-b-d

Betula pendula gracilis 139 Betula pendula Roth.
Cutleaf Weeping Birch var. gracilis Rehd.

A 4-6-10-17-27-b
B 3-5-6-7-8-a-j
C 2
D 1-2-3

Betula pendula purpurea 139 Betula pendula Roth.
Purpleleaf White Birch var. purpurea Schneid.

A 3

Betula populifolia 139 Betula populifolia Ait.
Gray Birch

A W-4-6-10-17-19-24-b-c-e-f-h-i
B W-5-7-a-b-j
C W-2-b
D W-1

BIGNONIA - Trumpetcreeper

Bignonia radicans 790 Campsis radicans Seem.
Trumpetcreeper

A 5-6

BUDDLEIA - Butterflybush

Buddleia davidi 767 Buddleia Davidi Franch.
Orange-eye Butterflybush

A 1-5-7-22-24
B
C
D 2

Not desirable where a definite shrub mass is wanted as the plant kills to the ground each winter. Grown as herbaceous perennial it makes a fine plant. The variety with improved flowers, magnifica, is the one commonly cataloged.

CALYCANTHUS - Sweetshrub

Calycanthus fertilis 262 Calycanthus fertilis Walt.
Smooth Sweetshrub

A b

Calycanthus floridus 261 Calycanthus floridus L.
Common Sweetshrub

A 10-21-24

CARAGANA - Pea-shrub

Caragana arborescens 510 Caragana arborescens Lam.
Siberian Pea-tree

A 9-10-15-17-18-19-20-24-26
B
C
D 1

CARPINUS - Hornbeam

Carpinus caroliniana 149 Carpinus caroliniana Walt.
American Hornbeam

A W-7-17-24-27-b-h
B W-a-b-j

CASTANEA - Chestnut

Castanea dentata American Chestnut	159	Castanea dentata Borkh.

A W-10-17-b
B w-1-5-8-b-j

CATALPA - Catalpa

Catalpa bignonioides Common Catalpa	791	Catalpa bignonioides Walt.

A 1-4-6-10-12

Catalpa bignonioides nana Umbrella Catalpa	791	Catalpa bignonioides Walt. var. nana Bur.

A 1-4-6-10-15-27

Standardized Plant Names : " C. bungei is commonly misapplied to the Umbrella Catalpa. The true C. bungei, the Manchurian Catalpa, a different and distinct species is now coming into trade."

Catalpa speciosa Western Catalpa	791	Catalpa speciosa Warder.

A 17

CEANOTHUS - Ceanothus

Ceanothus americanus Jersey-tea	597	Ceanothus americanus L.

A W
B W-b

CELASTRUS - Bittersweet

Celastrus orbiculatus Oriental Bittersweet	554	Celastrus articulata Thunb.

A 21-24

Celastrus scandens 553 Celastrus scandens L.
American Bittersweet

A W-1-4-5-6-8-10-12-15-17-18-19-21-23-24-26-27-b
B W-3-4-5-7-8-a-b
C 1-2
D 1

CEPHALANTHUS - Buttonbush

Cephalanthus occidentalis 793 Cephalanthus occidentalis L.
Common Buttonbush

A W-17-b
B W-5-8-a-b
C W-2

CERCIDIPHYLLUM

Cercidiphyllum japonicum 214 Cercidiphyllum japonicum Sieb. & Zucc.
Katsura-tree

A 6-24
B
C
D 1

CHAMAECYPARIS

Chamaecyparis obtusa 18 Chamaecyparis obtusa Endl.
Hinoki Cypress

A 8-24

Chamaecyparis obtusa nana 19 Chamaecyparis obtusa Endl. var. nana Carr.
Dwarf Hinoki Cypress

A 10

Chamaecyparis pisifera 19 Chamaecyparis pisifera Endl.
Sawara Retinospora

A 2-4-6-9-10-13-17-24
B 4-7
C
D 1

Chamaecyparis pisifera aurea 19 Chamaecyparis pisifera Endl.
Golden Sawara Retinospora var. aurea Carr.

A 1-2-4-6-8-9-10-22-24-25
B 3-7

Chamaecyparis pisifera filifera 19 Chamaecyparis pisifera Endl.
Thread Retinospora var. filifera Beiss.

A 4-6-9-10-13-24-25
B 7
C
D 1

The hardiest of the group.

Chamaecyparis pisifera filifera aurea 19 Chamaecyparis pisifera Endl.
Golden Thread Retinospora var. "filifera aurea" Beiss.

A 8-24
B
C
D 1

Chamaecyparis pisifera plumosa 19 Chamaecyparis pisifera Endl.
Plume Retinospora var. plumosa Beiss.

A 6-10-24

Chamaecyparis pisifera squarrosa 20 Chamaecyparis pisifera Endl.
Moss Retinospora var. squarrosa Beiss & Hochst.

A 1-4-24
B
C
D 1

Chamaecyparis thyoides Whitecedar	17	Chamaecyparis thyoides Brit.

A w-19-b

CHAMAEDAPHNE - Leatherleaf

Chamaedaphne calyculata Leatherleaf	712	Chamaedaphne calyculata Moench.

A W-17-b-c-e-i
B W-a-b
C W-b
D W-b

CHIMAPHILA - Pipsissewa

Chimaphila umbellata Common Pipsissewa	675	Chimaphila umbellata Nutt.

A W-b-e
B W-b
C W-b
D W-b-d

CHIOGENES

Chiogenes hispidula Creeping Snowberry	723	Chiogenes hispidula Torr. & Gr.

A W-b-c-e-i
B W-a-b
C W-b-c
D W-b

CHIONANTHUS - Fringetree

Chionanthus virginica White Fringetree	759	Chionanthus virginica L.

A 2-4-7-9-10-17-19-23
B 4-5-8-9

CLADRASTIS - Yellow-wood

Cladrastis lutea 486 Cladrastis lutea K. Koch.
Yellow-wood

A 10-16-19-b
B 3-5

Probably not hardy beyond Zone A.

CLEMATIS - Clematis

Will winter-kill if roots are in wet soil during the winter.

Clematis jackmani 222 x Clematis Jackmani Th. Moore
Jackman Clematis (C. lanuginosa x Viticella)

A 4-6-10-15-24
B 3-8-9
C
D 2

Clematis paniculata 226 Clematis paniculata Thunb.
Sweet Autumn Clematis

A 1-4-5-10-18-19-20-21-22-24-26-27
B 3-4-5-7-8-9
C 1
D 1

Clematis lawsoniana henryi 224 Clematis Lawsoniana Anderson-Henry
Henry Clematis var. Henryi Rehd.

A 23

Clematis tangutica 229 Clematis tangutica Korsh.
Golden Clematis

A 24

Clematis virginiana 227 Clematis virginiana L.
Virgins-bower

A W-6-17-18-21-23-24-27-b-c-i
B W-8-a-b
C 1

Clematis vitalba 227 Clematis Vitalba L.
Travelers-joy

A 26

CLETHRA - Clethra

Clethra alnifolia 674 Clethra alnifolia L.
Summersweet

A w-4-5-7-10-18-19-21-24-b-c
B 8

COLUTEA - Bladder-senna

Colutea arborescens 508 Colutea arborescens L.
Common Bladder-senna

A 10-16-24

COMPTONIA - Sweetfern

Comptonia asplenifolia 124 Comptonia aspleniifolia Ait.
Sweetfern

A W-10-15-17-24-b-c-e-f-i
B W-a-b-j

COREMA

Corema conradi 533 Corema Conradii Torr.
Broom-crowberry

A W-Thunderhole, Mt. Desert-a-b-c-e-i

CORNUS - Dogwood

Cornus alba argenteo-variegata 668 Cornus alba L.
Silverblotch Dogwood var. argenteo-marginata Rehd.

A 6-9

Cornus alba sibirica 669 Cornus alba L.
Coral Dogwood var. sibirica Loud.

A 1-5-6-8-10-17-24

Cornus alternifolia 668 Cornus alternifolia L.
Pagoda Dogwood

A W-17-b-c-e-i
B W-8w-a-b-j
C W-b
D W-2-b

Cornus amomum 669 Cornus Amomum Mill.
Silky Dogwood

A W-7-8-10-17-19-20-24-b
B W-3-8-a-b
C W-b

Cornus florida 673 Cornus florida L.
Flowering Dogwood

A W-10-15-21-24-h

The red flowering variety, rubra, is very desirable.

Cornus mas 672 Cornus mas L.
Cornelian-cherry

A 1-3-11-17-b
B 3-5

Cornus paniculata 670 Cornus racemosa Lam.
Gray Dogwood

A W-4-7-8-10-17-19-24
B W-3-7-9-a-b

Cornus purpusi 670 Cornus obliqua Raf.
Pale Dogwood

A
B 8

Cornus rugosa 669 Cornus rugosa Lam.
Roundleaf Dogwood

A W-17-24w-b-c-e-i
B W-8w-a-b

Cornus sanguinea 672 Cornus sanguinea L.
Bloodtwig Dogwood

A 17
B 8

Cornus sanguinea viridissima 672 Cornus sanguinea L.
Greentwig Dogwood var. viridissima Dieck.

A
B
C
D 2

Cornus stolonifera 669 Cornus stolonifera Michx.
Red-osier Dogwood

A W-1-4-6-8-10-17-24-26-b-i
B W-5-8-9-a-b-j
C W-1-2
D W-1-2-3-b-d

Cornus stolonifera flaviramea Goldentwig Dogwood	669	Cornus stolonifera Michx. var. flaviramea Rehd.
A 7-8		

CORYLUS - Hazelnut

Corylus americana American Hazelnut	154	Corylus americana Marsh.
A W-b-h B W-3-9-17-a-b-j		
Corylus avellana atropurpurea Purple Filbert	153	Corylus Avellana L. var. fusco-rubra Dipp.
A 1		
Corylus rostrata Beaked Hazelnut	155	Corylus cornuta Marsh.
A W-5-24-b-c-e-h-i B W-1-3-9-a-b-j C W-2-b D W-b		

COTONEASTER - Cotoneaster

Cotoneaster acutifolia Peking Cotoneaster	357	Cotoneaster acutifolia Turcz.
A 14		
Cotoneaster divaricata Spreading Cotoneaster	354	Cotoneaster divaricata Rehd and Wils.
A 6-7-8-10-14-18-21-22-24 B 2-4		
Cotoneaster horizontalis Rock Cotoneaster	354	Cotoneaster horizontalis Decne.
A 5-6-8-10-17-21-22-24-25		

CRATAEGUS - Hawthorn

Crataegus coccinea 366 (Crataegus pedicellata Sarg.)
Thicket Hawthorn

A W-11-a-c
B W-7-b

Crataegus cordata 371 Crataegus phaenopyrum Med.
Washington Hawthorn

A 1-3-15-16-a

Crataegus crusgalli 368 Crataegus crus-galli L.
Cockspur Thorn

A 1-2-7-10-13-19-20-24
B 5-a

Crataegus oxyacantha 374 Crataegus Oxyacantha L.
English Hawthorn

A w-1-8-9-10-24-26
B w-3-8-9-a
C
D 1

C. monogyna is often confused with this species

Crataegus oxyacantha pauli 374 Crataegus Oxyacantha L.
Paul English Hawthorn var. Paulii Rehd.

A 1-4-6-10-15-14-20-21-24-26-27
B 7

Crataegus punctata 369 Crataegus punctata Jacq.
Dotted Hawthorn

A W-1w-24-26
B
C W-2w

CYDONIA - Quince

Cydonia japonica 401 Chaenomeles lagenaria Koidz.
Flowering Quince

A 1-4-6-8-10-12-15-17-18-19-21-22-24
B 4-5-7-8-9
C
D 2

Tips are dying back in Zone D
Called Chaenomeles in publications by Bailey and Rehder.

Cydonia oblonga 402 Cydonia oblonga Mill.
Common Quince

A 6

CYTISUS - Broom

Cytisus scoparius 494 Cytisus scoparius Lk.
Scotch Broom

A w-lw

Should have a protected location.

DAPHNE - Daphne

Daphne cneorum 646 Daphne Cneorum L.
Rose Daphne

A 1-5-6-9-10-23-25-b
B 9
C
D 1

Daphne mezereum 645 Daphne Mezereum L.
February Daphne

A 4-15-17-19-b
B w-2-4-Winthrop(w)-b

DEUTZIA - Deutzia

Often kills back because of late growth which does not properly harden in our short growing season. The flower buds are often killed in the colder zones. Many of the varieties are not hardy; especially those of D. scabra.

Deutzia gracilis 283 Deutzia gracilis Sieb. & Zucc.
Slender Deutzia

A 1-2-4-5-6-10-17-24-25
B 7
C
D 1

Deutzia lemoinei 289 x Deutzia Lemoinei Lemoine.
Lemoine Deutzia (D. parviflora x gracilis)

A 1-6-13-17-22-24
B
C 2

The hardiest of the Deutzias.

Deutzia scabra and varieties 284 Deutzia scabra Thunb.
Fuzzy Deutzia

A 1-2-4-5-6-8-9-13-15-18-19-20-21-24-25
B 3-7
C
D 1-2

DIERVILLA - Bush-honeysuckle

Diervilla trifida 816 Diervilla Lonicera Mill.
Dwarf Bush-honeysuckle

A W-3-10-17-23-b-c-e-i
B W-8w-a-b-j
C W-2-b
D W-b

DIRCA - Leatherwood

Dirca palustris 648 Dirca palustris L.
Leatherwood

A W-15-17-24-b-h
B W-a-b
C
D 2

ELAEAGNUS - Elaeagnus

Elaeagnus angustifolia 650 Elaeagnus angustifolia L.
Russian-olive

A 1-10-15-16-17
B 3-5-6-8
C
D 1

Very hardy.

Elaeagnus longipes 651 Elaeagnus multiflora Thunb.
Cherry Elaeagnus

A 17-24
B 3-9

EMPETRUM - Crowberry

Empetrum nigrum 534 Empetrum nigrum L.
Crowberry

A W-b-c-e-f-i
B
C W-a
D W-a

EPIGAEA - Trailing-arbutus

Epigaea repens 715 Epigaea repens L.
Trailing-arbutus

A W-17-b-c-e
B W-8-a-b
C W-b

ERICA - Heath

Erica tetralix 720 Erica Tetralix L.
Crossleaf Heather

A
B
C b

Reported growing wild on an abandoned farm in Madrid (Maine Naturalist 6:114 and 7:25).

EUONYMUS - Euonymus

Euonymus alatus 548 Evonymus alata Reg.
Winged Euonymus

A 1-5-6-8-9-10-25
B 3-5-7-8-9
C
D 1

Euonymus americanus 548 Evonymus americana L.
Brook Euonymus

A 1-2-5-6-7-9-10-15-21-24

Euonymus atropurpureus 549 Evonymus atropurpurea Jacq.
Wahoo

A 1-5
B 5

Euonymus bungeanus 550 Evonymus Bungeana Maxim.
Winterberry Euonymus

A 24

Euonymus europaeus European Burningbush	549	Evonymus europaea L.

A 14-24-26
B 8

Euonymus latifolius Broadleaf Burningbush	551	Evonymus latifolia Scop.

A 5

Euonymus radicans Wintercreeper	552	Evonymus radicans Sieb.

A 1-2-4-5-6-10-19-20-21-24
B 2-3-7
C
D 1

Euonymus radicans acutus Sharpleaf Wintercreeper	552	Evonymus radicans Sieb. var. acuta Rehd.

A 19-24
B 7

Euonymus radicans minimus Baby Wintercreeper	552	Evonymus radicans Sieb. var. minima Simon-Louis.

A 1-2-3-6-10-24
B 2
C
D 1

Euonymus radicans vegetus Gibleaf Wintercreeper	552	Evonymus radicans Sieb. var. vegeta Rehd.

A 1-2-10-17-21-24
B 3-8
C
D 1

EXOCHORDA - Pearlbush

Exochorda grandiflora 351 Exochorda racemosa Rehd.
Common Pearlbush

A 2-16
B 3-9

FAGUS - Beech

Fagus americana 157 Fagus grandifolia Ehrh.
American Beech

A W-1-10-17-19-24-b-c-e-h-i
B W-5-9-b-j
C W-2
D W-1-2-b

Fagus sylvatica 157 Fagus sylvatica L.
European Beech

A 1-8-17-20-23-24-h

Fagus sylvatica incisa 157 Fagus sylvatica L.
Cutleaf Beech var. laciniata Vignet.

A 11-20-24

Fagus sylvatica pendula 158 Fagus sylvatica L.
Weeping Beech var. pendula Loud.

A 16

Fagus sylvatica purpurea 157 Fagus sylvatica L.
Purple Beech var. atropunicea West.

A 1-10-13-15-19-20-22-24-27
B 9

FORSYTHIA - Forsythia

Apt to lose its flower buds by freezing in Zones B to D, so should be given a protected location. It has a pleasing enough growth to commend it for its shrubby growth. Frequently, recent growth is killed back to the snow in Zones C and D.

Forsythia intermedia 750 x Forsythia intermedia Zabel.
Border Forsythia (F. suspensa x viridissima)

A 1-5-6-9-10-12-13-15-18-19-21-25-27
B 7-8
C
D 1-2

Forsythia suspensa 749 Forsythia suspensa Vahl.
Weeping Forsythia

A 1-2-4-5-9-10-17-18-19-20-24-26-27
B 2-7-8-9
C
D 1-2-3

Forsythia suspensa fortunei 749 Forsythia suspensa Vahl.
Fortune Forsythia var. Fortunei Rehd.

A 18
B 4-9
C 2
D 2

Forsythia viridissima 750 Forsythia viridissima Lindl.
Greenstem Fprsythia

A 10-26

FRAXINUS - Ash

Fraxinus americana 744 Fraxinus americana L.
White Ash

A W-17-b-c-e-h-i
B W-5-7-8-a-b-j
C W-b

Fraxinus excelsior 747 Fraxinus excelsior L.
European Ash

A 2

Fraxinus lanceolata 745 Fraxinus pennsylvanica Marsh.
Green Ash var. lanceolata Sarg.

A W-h
B W-8-b-j

Fraxinus nigra 747 Fraxinus nigra Marsh.
Black Ash

A W-17-c-e-h-i
B W-5-8-j
C
D W-d

Fraxinus pennsylvanica 745 Fraxinus pennsylvanica Marsh.
Red Ash

A W-b-h-j
B W-5-8-a-b-j

GAULTHERIA

Gaultheria procumbens 716 Gaultheria procumbens L.
Wintergreen

A W-17-23-24-a-b-c-e-i
B W-a-b-j
C
D W-b

GAYLUSSACIA - Huckleberry

Gaylussacia baccata 724 Gaylussacia baccata K. Koch.
Black Huckleberry

A W-17-b-c-e-i
B W-a-b
C
D W-b

GENISTA - Broom

Genista tinctoria 490 Genista tinctoria L.
Woadwaxen

A b

GINKGO - Maidenhair-tree

Ginkgo biloba 1 Ginkgo biloba L.
Maidenhair-tree

A 2-6-9-10-18-24

GLEDITSIA - Honeylocust

Gleditsia triacanthos 483 Gleditsia triacanthos L.
Common Honeylocust

A 1-6-10-15-17-19
B 2-4-5-8-9-j
C
D 2-3

HAMAMELIS - Witch-hazel

Hamamelis virginiana 323 Hamamelis virginiana L.
Common Witch-hazel

A W-7-10-15-17-23-b-c-i
B W-3-5-8w-9-a-b-j
C W-b

HEDERA - Ivy

Hedera helix 658 Hedera helix L.
English Ivy

A 2-18-24

Can be successfully wintered over in Zone A if grown in a site protected from winter sun and wind or if given a heavy mulch. Hedera helix baltica is a recent introduction that is supposed to be hardier.

HIBISCUS - Hibiscus

Hibiscus syriacus 619 Hibiscus syriacus L.
Shrub-althea

A 4-9-10

Not hardy unless well protected. Kills to snow in all except Zone A.

HICORIA - Hickory

Hicoria ovata 133 Carya ovata K. Koch.
Shagbark Hickory

A w-1-6-17-b
B b

HYDRANGEA - Hydrangea

Hydrangea arborescens grandiflora 291 Hydrangea arborescens L.
Snowhill Hydrangea var. grandiflora Rehd.

A 1-2-4-5-6-10-12-13-15-18-19-20-21-22-24-26-27
B 3-4-5-7-8
C 1-2
D 1-2-3

Hydrangea paniculata grandiflora 294 Hydrangea paniculata Sieb.
Peegee Hydrangea var. grandiflora Sieb.

A 1-2-4-5-6-8-10-12-13-15-18-19-20-21-22-24-26-27
B 1-2-4-5-6-7-8-9
C 1-2
D 1-2-3

It is difficult to tell the species from the variety so that H. paniculata has been included with its more common variety. Waugh recommends the species, H. paniculata, as a more desirable type of growth.

Hydrangea petiolaris 296 Hydrangea petiolaris Sieb. & Zucc.
Climbing Hydrangea

A 25

HYPERICUM - St. Johnswort

Hottes says that they are more at home in sandy soil and will be hardier than in heavy water-holding clays.

Hypericum aureum 629 Hypericum aureum Bartr.
Golden St.Johnswort

A 6-9-23-24
B 8
C
D 1

Hypericum densiflorum 629 Hypericum densiflorum Pursh.

A 2-6

Hypericum patulum henryi 627 Hypericum patulum Thunb.
Henry Hypericum var. Henryi Veitch.

A 6

ILEX - Holly

Ilex glabra 544 Ilex glabra Gray.
Inkberry

A 10

Ilex laevigata 545 Ilex laevigata Gray.
Smooth Winterberry

A W-b
B W-a-b

Ilex verticillata 545 Ilex verticillata Gray.
Common Winterberry

A W-7-8-18-19-17-21-24-b-c-e-i
B W-5-7w-8w-a-b-j
C W-b
D W-1-d

JUGLANS - Walnut

Juglans cinerea 129 Juglans cinerea L.
Butternut

A W-4-6-b
B W-3-5-9-b-j
C W-1-b
D W-2

Jugland nigra 128 Juglans nigra L.
Black Walnut

A 10-19-W.Falmouth-Limerick-b
B 4-5-8

Juglans regia 127 Juglans regia L.
Persian Walnut

A 10

Single fruiting plant on the Perry Estate, Falmouth Foresides.

Juglans sieboldiana 129 Juglans Sieboldiana Maxim.
Japanese Walnuts

A 14

Young plants hardy at Strand Nursery, New Gloucester.

JUNIPERUS - Juniper

Juniperus chinensis 13 Juniperus chinensis L.
Chinese Juniper

A
B 3

Juniperus chinensis pfitzeriana 13 Juniperus chinensis L.
Pfitzer Juniper var. Pfitzeriana Spaeth.

A 1-4-6-7-8-9-10-15-20-22
B 2-4-9
C
D 1

Juniperus communis 10 Juniperus communis L.
Common Juniper

A b
B b
C w-Gilead

Juniperus communis depressa 10 Juniperus communis L.
Prostrate Juniper var. depressa Pursh.

A W-1-9-10-17-24-c-e-i
B W-3-8w-a

Juniperus communis hibernica 10 Juniperus communis L.
Irish Juniper var. hibernica Gord.

A 4-9-10-13

Apt to burn in winter on the sunny side.

Juniperus communis suecica 10 Juniperus communis L.
Swedish Juniper var. suecica Ait.

A 6-8-9

Apt to burn in winter on the sunny side.

Juniperus excelsa stricta 13 Juniperus excelsa Bieb.
Spiny Greek Juniper var. stricta Rollisson

A 1-4-6-8-9-10-24

Juniperus horizontalis 15 Juniperus horizontalis Moench.
Creeping Juniper

A w-5-6-17-18-21-24-b-c-i

Juniperus horizontalis douglasi 15 Juniperus horizontalis Moench.
Waukegan Juniper var. Douglasii Rehd.

A 5-25

Juniperus sabina 15 Juniperus sabina L.
Savin Juniper

A 1-4-5-6-10-13-24
B 4-9
C
D 1

Juniperus virginiana 14 Juniperus virginiana L.
Redcedar

A w-1-2-4-5-7-8-10-13-17-b
B 7

Very hardy

Juniperus virginiana glauca 14 Juniperus virginiana L.
Silver Redcedar var. glauca Carr.

A 10

KALMIA - Kalmia

Kalmia angustifolia 705 Kalmia angustifolia L.
Lambkill

A W-1w-17-c-b-e-f-i
B W-8w-a-b
C W-b
D W-a-b-d

Kalmia latifolia 704 Kalmia latifolia L.
Mountain-laurel

A w-1-2-6-7-8-10-15-17-20-21-23-24-Cherryfield(w)-b
B 7-9-a
C
D 1

Kalmia polifolia 705 Kalmia polifolia Wangenh.
Bog Kalmia

A W-b-c-e
B W-8w-a-b
C W-b

KERRIA - Kerria

Twigs are often winter-killed. Not satisfactory beyond Zone A where a definite shrub mass is needed. Can be used as a herbaceous perennial and grown for its season's growth and flowers.

Kerria japonica 407 Kerria japonica DC.
Kerria

A 15
B 7

Kerria japonica argenteo-variegata 407 Kerria japonica DC.
Silver Kerria var. picta Sieb.

A 13-15
B 3

Kerria japonica florepleno 408 Kerria japonica DC.
Double Kerria var. pleniflora Witte.

A 6-8-9-10-13-15-22
B 3

Not especially superior to single.

KOLKWITZIA

Kolkwitzia amabilis 815 Kolkwitzia amabilis Graebn.
Beautybush

A 7-22
B 7
C 2
D 1

W. H. Judd of the Arnold Arboretum says; "To be successful Kolkwitzia must be grown where the air circulates freely during the winter, otherwise the previous year's wood is liable to get winterkilled."

LABURNUM - Laburnum

Laburnum alpinum 492 Laburnum alpinum Bercht. & Prsl.
Scotch Laburnum

A 24

Laburnum vulgare 491 Laburnum anagyroides Med.
Goldenchain

A 7-19

LARIX - Larch

Larix europaea 51 Larix decidua Mill.
European Larch

A 4-10-15-24-b

Larix laricina 52 Larix laricina K. Koch.
American Larch

A W-1-5-6-10-15-17-22-b-c-e-h-i
B W-7-8w-a-b-j
C W-1
D W-b

Larix leptolepis 51 Larix Kaempferi Sarg.
Japanese Larch

A
B
C
D 1

Larix sibirica 51 Larix sibirica Ledeb.
Siberian Larch.

A
B
C Seedlings grown at Cupsuptic Nursery.

LEDUM - Labrador-tea

Ledum groenlandicum 678 Ledum groenlandicum Oed.
True Labrador-tea

A W-17-22w-b-c-e-f-i
B W-8w-a
C W-b
D W-b-d

LEIOPHYLLUM - Sandmyrtle

Leiophyllum buxifolium prostratum 703 Leiophyllum buxifolium Ell.
Allegheny Sandmyrtle var. prostratum Gr.

A 10

LESPEDEZA - Bushclover

Lespedeza formosa 516 Lespedeza formosa Koehne.
Purple Bushclover

A 29

Commonly cataloged as: L. racemosa, L. sieboldi, and Desmodium penduliflorum.

LEUCOTHOE - Leucothoe

Leucothoe catesbaei 713 Leucothoe Catesbaei Gray.
Drooping Leucothoe

A 1-5-8-10-15-17-24

LIGUSTRUM - Privet

Ligustrum amurense 763 Ligustrum amurense Carr.
Amur Privet

A 2-4-5-6-8-9-10-13-15-17
B 2-3-4-7

Ligustrum ibolium 763 x Ligustrum ibolium Coe.
Ibolium Privet (L. ovalifolium x obtusifolium)

A 6-8-9-10-14-4

Ligustrum ibota 764 Ligustrum obtusifolium Sieb. & Zucc.
Ibota Privet

A 3-9-10-19-21
B 3
C
D 2

Rehder says that the ibota of trade is not the true L. ibota Sieb. & Zucc., which is one of the least ornamental species.

Ligustrum ibota regelianum 764 Ligustrum obtusifolium Sieb. & Zucc.
Regel Privet var. Regelianum Rehd.

A 7-14-18-20
B 8

Ligustrum lodense 760 Ligustrum vulgare L.
Lodense Privet var. -------

A 9
B
C
D 2

Tips die back on these plants at D-2

Ligustrum vulgare 760 Ligustrum vulgare L.
European Privet

A 8-10-19-20-24-b
B 3-7-8
C 1
D 1

Subject to twig blight so that it is desirable to substitute L. amurense. Both are very hardy.

LINNAEA - Twinflower

Linnaea borealis americana American Twinflower	815	Linnaea borealis L. var. americana Rehd.

A W-b-c-e-i
B W-a-b
C
D W-b-d

LIRIODENDRON - Tuliptree

Liriodendron tulipifera Tuliptree	258	Liriodendron Tulipifera L.

A 8-19-24-Rockland-b

LONICERA - Honeysuckle

Lonicera bella Belle Honeysuckle	834	x Lonicera bella Zab. (L. Morrowii x tatarica)

A 24
B
C
D 1-2

Lonicera canadensis American Fly Honeysuckle	824	Lonicera canadensis Marsh.

A W-17-c-b-e-i
B W-a-b
C W-b
D W-b-d

Lonicera dioica Limber Honeysuckle	839	Lonicera dioeca L.

A W-a-b
B a

Lonicera japonica halliana 837 Lonicera japonica Thunb.
Hall Japanese Honeysuckle var. Halliana Nichols.

A 7-9

Lonicera korolkowi floribunda 833 Lonicera Korolkowii Stapf.
Broad Blueleaf Honeysuckle var. floribunda Nichols.

A 24

Lonicera maacki 835 Lonicera Maackii Maxim.
Amur Honeysuckle

A 3-8-24

Very hardy.

Lonicera morrowi 834 Lonicera Morrowii A. Gray
Morrow Honeysuckle

A 4-5-7-10-13-17-18-19-20-21-24-25
B 3-5-7-8
C 1
D 2

Lonicera periclymenum 841 Lonicera Periclymenum L.
Woodbine

A 15-21-24

Lonicera ruprechtiana 834 Lonicera Ruprechtiana Reg.
Manchurian Honeysuckle

A 14

Lonicera sempervirens 838 Lonicera sempervirens L.
Trumpet Honeysuckle

A 1-6-17-20-23-24-26-27-i
B 3-7-8-9
C 2
D 1

Lonicera tatarica 832 Lonicera tatarica L.
Tatarian Honeysuckle

A 1-2-4-5-6-7-8-10-12-15-17-19-22-24-26-27
B 3-4-5-7-8-9-a
C 1-2
D 2-3

Lonicera xylosteum 833 Lonicera Xylosteum L.
European Fly Honeysuckle

A b

Similar to L. morrowi, but hardier.

LYCIUM

Lycium halimifolium 783 Lycium halimifolium Mill.
Common Matrimony-vine

A 1-2-4-5-7-10-15-21-22-27-b
B 2-7-8-9
C 2

LYONIA

Lyonia ligustrina 711 Xolisma ligustrina Britt.
He-huckleberry

A W-b
B W-8w-a-b
C W-1w

MAGNOLIA - Magnolia

Magnolia acuminata 253 Magnolia acuminata L.
Cucumbertree

A 14-15
B 4-8-j

Magnolia glauca 255 Magnolia virginiana L.
Sweetbay

A 6

Growing in a very protected location.

Magnolia stellata 258 Magnolia stellata Maxim.
Star Magnolia

A 11

Mahonia aquifolium 233 Mahonia Aquifolium Nutt.
Oregon Hollygrape

A 18
B 3-4-7-8

Not hardy unless protected in winter. In Zone B exists only where covered with snow or mulch.

MALUS - Crab

Malus arnoldiana 395 x Malus arnoldiana Sarg.
Arnold Crab (M. floribunda x baccata)

A 17

Malus baccata 394 Malus baccata Borkh.
Siberian Crab

A 24

Malus coronaria 398 Malus coronaria Mill.
Wild Sweet Crab

A 8-24
B a

Malus floribunda 395 Malus floribunda Sieb.
Japanese Flowering Crab

A 8-9-10-24-26
B 7
C
D 1-2

Malus floribunda purpurea 393 x Malus purpurea Rehd.
Purple Crab (M. p. Niedzwetzkyana x atrosanguinea)

A 8

Malus halliana 395 Malus Halliana Koehne.
Hall Crab

A 9
B
C
D 1

Malus ioensis plena 399 Malus ioensis Brit.
Bechtel Crab var. plena Rehd.

A 1-6-7-8-9-11-14-15-18-19-22-23-24
B 3-4-5
C 2
D 2-3

Malus niedzwetzkyana 392 Malus pumila Mill.
Redvein Crab var. Niedzwetzkyana Schneid.

A 10-14
B
C
D 1

Malus robusta 394 x Malus robusta Rehd.
Cherry Crab (M. baccata x prunifolia)

A 17-24

Malus sargenti 396 Malus Sargenti Rehd.
Sargent Crab

A 8-14-23

Malus scheideckeri 395 x Malus Scheideckeri Zabel.
Scheidecker Crab (M. floribunda x prunifolia)

A 8

Malus sylvestris 392 Malus pumila Mill.
Apple

A W-1-6-7-10-12-15-18-20-24-a-c-h-i
B W-6-7-8-9-a-b
C W-1-2
D W-2

Malus toringoides 397 Malus toringoides Hughes.
Cutleaf Crab

A 8
B 9

MITCHELLA - Partridgeberry

Mitchella repens 795 Mitchella repens L.
Partridgeberry

A W-b-c-e
B W-a-b
C
D W-b

MORUS - Mulberry

Morus alba 197 Morus alba L.
White Mulberry

A 1-8-22-a-b
B 2

Morus alba pendula 197 Morus alba L.
Weeping Mulberry var. pendula Dipp.

A 12-16-18-19

MYRICA - Bayberry

Myrica carolinensis 123 Myrica caroliniensis Mill.
Northern Bayberry

A W-1-2-5-10-17-18-20-21-23-24-b-c-e-f-i

Myrica gale 124 Myrica Gale L.
Sweetgale

A W-7-17-b-c-e-f-i
B W-5-8w-a-b
C W-b
D W-b-d

NEMOPANTHUS - Mountain-holly

Nemopanthus mucronatus 546 Nemopanthus mucronata Trel.
Mountain-holly

A W-17-22-23-24-25-b-c-e-i
B W-8w-a-b-j
C W-2
D W-1-b-d

NYSSA - Tupelo

Nyssa sylvatica 654 Nyssa sylvatica Marsh.
Tupelo

A w-b-Drake Island, Wells (w)

OSTRYA - Hophornbeam

Ostrya virginiana 151 Ostrya virginiana K. Koch.
American Hophornbeam

A W-10-17-b-e-h
B W-2-7-a-b-j

OXYDENDRUM - Sourwood

Oxydendrum arboreum 713 Oxydendron arboreum DC.
Sourwood

A 2-7-17

PACHYSANDRA - Pachysandra

Pachysandra terminalis 532 Pachysandra terminalis Sieb. & Zucc.
Japanese Pachysandra

A 5-6-8-10-21-22-24
B 2-3
C
D 1

Should be protected from winter sun.

PHILADELPHUS - Mockorange

Commonly called Syringa in the eastern states.

Philadelphus aureus 277 Philadelphus coronarius L. var. aureus Rehd.
Golden Mockorange

A 6-9-24
B 7
C
D 1-2

Philadelphus coronarius 277 Philadelphus coronarius L.
Sweet Mockorange

A 1-2-5-6-8-10-13-15-17-18-21-24-26-27
B 3-4-7-8-9-a
C 1-2
D 1-2

Philadelphus grandiflorus 278 Philadelphus grandiflorus Willd.
Big Scentless Mockorange

A 5-24

Philadelphus inodorus 278 Philadelphus inodorus L.
Scentless Mockorange

A 17

Philadelphus lemoinei 279 x Philadelphus Lemoinei Lemoine
Lemoine Mockorange (P. microphyllus x coronarius)

A 2-9-21
B 7-8
C 1
D 1

Philadelphus "Virginal" 280 x Philadelphus virginalis Rehd.
Virginal Mockorange (P. Lemoinei x ? nivalis plenus)

A 14-21

Reported by a local plantsman to be a bit tender.

PHYSOCARPUS - Ninebark

Physocarpus opulifolius 329 Physocarpus opulifolius Maxim.
Common Ninebark

A w-1-2-5-6-9-10-13-15-17-19-20-21-24-26-27-b
B 3-4-5-7-8-9-b
C 1
D 1-2

Physocarpus opulifolius luteus 330 Physocarpos opulifolius Maxim.
Goldleaf Ninebark var. luteus Zabel.

A 1-2-6-8-10-15-19-24
B 7
C 2
D 1

PICEA - Spruce

Picea canadensis 46 Picea glauca Voss.
White Spruce

A W-6-17-21-24-26-27-b-c-e-f-h-i
B W-3-5-7-8-9-a-b-j
C W-1
D W-1-2-3-b-d

Picea engelmanni 47 Picea Engelmanni Engelm.
Engelmann Spruce

A
B 5

Very hardy.

Picea excelsa 43 Picea Abies Karst.
Norway Spruce

A 4-5-6-10-15-17-19
B 3-5-8-a-j
C 1

Picea excelsa pendula 44 Picea Abies Karst.
Weeping Norway Spruce

A 11
B 3-5

Picea glauca conica 47 Picea glauca Voss.
Dwarf Alberta Spruce var. conica Rehd.

A 17-21-24-27

Picea mariana 46 Picea mariana B.S.P.
Black Spruce

A W-17-24-b-c-e-h-i
B W-b-j
C W-1

Picea orientalis Oriental Spruce	45	Picea orientalis Carr.

A 24

Should have a protected site.

Picea pungens Colorado Spruce	47	Picea pungens Engelm.

A 1-2-4-6-10-24
B 3-5

Picea pungens glauca Blue Colorado Spruce	47	Picea pungens Engelm. var. glauca Beiss.

A 1-4-5-6-9-10-13-15-24
B 3-4-5-7-8-j
C 1-2
D 1-2

Picea pungens glauca pendula Weeping Blue Spruce		----------

A 24

Picea pungens kosteri Koster Blue Spruce	47	Picea pungens Engelm. var. Kosteriana Mast.

A 1-4-6-10-19-24
B 3-5-7

Picea rubra Red Spruce	46	Picea rubra Link.

A W-17-24-b-e-f-i
B W-5-b-j
C
D W-d

Picea sitchensis 48 Picea sitchensis Carr.
Sitka Spruce

A
B
C Seedlings grown at Cupsuptic Nursery.

PIERIS

Pieris floribunda 710 Pieris floribunda Benth. & Hook.
Mountain Andromeda

A 8-15-17

PINUS - Pine

Pinus banksiana 64 Pinus Banksiana Lamb.
Jack Pine

A w-23-25-b
B w-5-a
C
D w-d

Pinus cembra 56 Pinus Cembra L.
Swiss Stone Pine

A 5-9-10
B 3

Pinus montana 60 Pinus mugo Turra.
Swiss Mountain Pine

A
B 5-8-j

Pinus montana mughus 60 Pinus mugo Turra.
Mugho Pine var. mughus Zenari.

A 1-2-4-5-6-8-9-10-13-14-18-19-21-22-24-b
B 4-5
C 1-2
D 1

Pinus nigra 61 Pinus nigra Arnold.
Austrian Pine

A 10-19-21
B 3-5-7-j

Pinus parviflora 57 Pinus parviflora Sieb. & Zucc.
Japanese White Pine

A 5-7-10
B 5

Pinus ponderosa 62 Pinus ponderosa Dougl.
Western Yellow Pine

A
B 8

Pinus resinosa 59 Pinus resinosa Ait.
Red Pine

A W-1-6-7-10-17-23-a-b-c-e-f-i
B W-3-5-7-b-j
C W-1-2-b
D W-b-d

Pinus rigida 64 Pinus rigida Mill.
Pitch Pine

A W-17-24-b-c-i
B 5-7

Pinus strobus 58 Pinus strobus L.
White Pine

A W-1-6-15-17-24-b-c-e-h-i
B W-3-5-7-8-9-a-b-j
C W-2
D W-1-3-d

Pinus sylvestris 59 Pinus sylvestris L.
Scotch Pine

A 1-6-10-17-24

B 5-7-8-a-j
C 2

PLATANUS - Planetree

Platanus occidentalis 326 Platanus occidentalis L.
American Planetree

A w-Casco (w)
B w-6-Vassalboro-a

Platanus orientalis 325 Platanus orientalis L.
European Planetree

A 4

POLYGONUM - Fleeceflower

Polygonum auberti 208 Polygonum Aubertii L. Henry
China Fleecevine

A 18-20

PUPULUS - Poplar

Populus alba 84 Populus alba L.
White Poplar

A w-1-5-6-10-12-15-17-24-a-b-i
B w-5-8-b-j
C 1-2
D 2

Populus balsamifera 89 Populus tacamahaca Mill.
Balsam Poplar

A W-17-26-b-c-i
B W-8-9-a-b-j
C W-2
D W-1-3-b-d

Populus candicans 89 Populus candicans Ait.
Balm-of-Gilead Poplar

A w-5-15-17-b-h-i
B 8-j

Populus eugenei 91 (x Populus canadensis Moench.
Carolina Poplar var. Eugenei Schelle.)

A W-1-5-6-10-19-22-24-i
B W-3-7-8-9-j
C W-1-2
D W-2-3

A composite group. Same as P. deltoides in the nursery trade. Includes P. monilifera Ait. of Botany manuals.

Populus grandidentata 85 Populus grandidentata Michx.
Largetooth Aspen

A W-1-17-24-a-b-c-e-i
B W-8w-a-b-j
C
D W-a-d

Populus nigra italica 91 Populus nigra L.
Lombardy Poplar var. italica Dur.

A 1-5-6-9-10-15-19-21-22-24-26
B 1-6-7-b-j
C 2
D 1-2-3

Use for only temporary effect as the larger trees lose their tops from exposure. At many of the locations in the state that part of the tree exposed above the protection from adjacent buildings or vegetation has a very ragged appearance.

Populus suaveolens 88 Populus suaveolens Fisch.
Mongolian Poplar

A 9

Populus tremuloides 85 Populus tremuloides Michx.
Quaking Aspen

A W-1-6-17-24-b-c-e-h-i
B W-7-8-a-b-j
C W-2
D W-1-2-3-b-d

POTENTILLA - Cinquefoil

Potentilla fruticosa 422 Potentilla fruticosa L.
Shrubby Cinquefoil

A W-24-c
B W-a-b
C W-b
D W-a-b

PRUNUS - Plum, Cherry, Apricot

Prunus americana 458 Prunus americana Marsh.
American Plum

A 1-4-5-10-15
B a
C
D 2

Prunus avium 471 Prunus avium L.
Mazzard

A 21-24-b-i
B 2

Prunus cerasifera 455 Prunus cerasifera Ehrh.
Myrobalan Plum

A
B
C
D 2

Prunus cerasifera pissardi — 455 — Prunus cerasifera Ehrh. var. Pissartii Bailey
Purpleleaf Plum

A 1-2-6-15
B 4-8-9
C
D 2

Prunus cerasus — 472 — Prunus Cerasus L.
Sour Cherry

A 1-4-6
B 8-9
C 2
D 2

Prunus glandulosa plena — 465 — Prunus glandulosa Thunb. variety
Flowering Almond

A 1-4-6-12-10-15-19
B 4-7-8-9
C
D 1-2

Prunus maritima — 457 — Prunus maritima Marsh.
Beach Plum

A w-8-17-b

Prunus nigra — 458 — Prunus nigra Ait.
Canada Plum

A W-17-b-g
B W-7-8-a-b
C
D W-2

Prunus pennsylvanica — 473 — Prunus pennsylvanica L.
Pin Cherry

A W-1-17-24-b-c-e-h-i
B W-a-j
C W-b
D W-1-2-b-d

Prunus pumila Sand Cherry	466	Prunus pumila L.
A B w-Basin Mills-b C w-b D w-b		
Prunus serotina Black Cherry	474	Prunus serotina Ehrh.
A W-5-6-17-19-24-26-b-c-h-i B W-7-8w-a-b-j C W-1-b		
Prunus serrulata Oriental Cherry	469	Prunus serrulata Lindl.
A 16-24		
Prunus subhirtella pendula Shidare-higan	468	Prunus subhirtella Miq. var. pendula Tanaka.
A 16-24		
Prunus tomentosa Nanking Cherry	464	Prunus tomentosa Thunb.
A 9-13-14		
Prunus triloba Flowering Plum	463	Prunus triloba Lindl.
A 1		
Prunus virginiana Common Chokecherry	476	Prunus virginiana L.
A W-6-10-17-23-26-27-b-c-h-i B W-7-8-a-b-j C W-1-b D W-b		

PSEUDOTSUGA

Pseudotsuga douglasi 37 Pseudotsuga taxifolia Brit.
Douglas-fir

A 1-6-8-9-10-17
B 2-5-7-8-9-j

PTELEA - Hoptree

Ptelea trifoliata 523 Ptelea trifoliata L.
Common Hoptree

A 2-18-b
B 5
C 5

Its golden variety is considered to be the best of the golden leaved plants.

PYRUS - Pear

Pyrus communis 404 Pyrus communis L.
Common Pear

A 1-5-6-10-15-22-24

QUERCUS - Oak

Quercus alba 178 Quercus alba L.
White Oak

A W-10-13-17-21-24-b-h
B w-5-b

Quercus bicolor 180 Quercus bicolor Willd.
Swamp White Oak

A W-b

Quercus coccinea 169 Quercus coccinea Muenchh.
Scarlet Oak

A W-17-Lyman-b

Quercus ilicifolia Scrub Oak A W-4w-b-c-e B b	167	Quercus ilicifolia Wangh.
Quercus imbricaria Shingle Oak A 10-11-13	166	Quercus imbricaria Michx.
Quercus macrocarpa Mossycup Oak A W-17 B W-5-7-8-9-b-j	180	Quercus macrocarpa Michx.
Quercus palustris Pin Oak A 17-24 B 4-8-Hinckley C 2	169	Quercus palustris L.
Quercus prinus Chestnut Oak A York-b	181	Quercus montana Willd.
Quercus robur English Oak A 11-13-24 B 3-b	177	Quercus robur L.
Quercus robur concordia ------- A 11-24	177	Quercus robur L. var. concordia K. Koch.

Quercus rubra ambigua 169 Quercus borealis Michx.
Northern Red Oak

A W-1-5-6-10-15-17-21-24-b-c-e-f-h-i
B W-3-5-7-8-b-j
C W-b
D W-b

Quercus velutina 168 Quercus velutina Lam.
Black Oak

A W-17-b

RHAMNUS - Buckthorn

Rhamnus cathartica 590 Rhamnus cathartica L.
Common Buckthorn

A w-2-6-8-15-21-26-b
B w-3-5-8-b-j
C
D 1

Rhamnus frangula 595 Rhamnus Frangula L.
Glossy Buckthorn

A 2-9

RHODODENDRON - Rhododendron

Deciduous Rhododendrons are called Azaleas in this study. For a detailed discussion of this group refer to The Monograph of Rhododendrons and Azaleas, Wilson & Rehder, issued by the Arnold Arboretum, Boston.

In winter Rhododendrons should have shade from sun and protection from drying winds. They prefer a cool, partly shaded northern slope.

Rhododendron carolinianum 688 Rhododendron carolinianum Rehd.
Carolina Rhododendron

A 4-6-8-17-18-24
B 5-8

Considered by E. H. Wilson to be the finest species for cold regions.

Rhododendron catawbiense 682 Rhododendron catawbiense Michx.
Catawba Rhododendron

A 1-6-8-9-10-17-18-24
B 4-8-a
C
D 1

Rhododendron "hybrids" -- ----------
Hybrid Rhododendrons

A 1-2-5-24-25
B 3-7-8

Usually crosses between R. Maximum and R. catawbiense.

Rhododendron maximum 684 Rhododendron maximum L.
Rosebay Rhododendron

A w-1-4-5-8-10-17-20-24-25-26-b
B 7-8

RHODORA - Rhodora

Rhodora canadensis 697 Rhododendron canadense Torr.
Rhodora

A W-8-17-b-c-e-f-i
B W-3-8w-b-j
C W-b
D W-1-a-b-d

RHODOTYPOS - Jetbead

Rhodotypos kerrioides 408 Rhodotypus scandens Mak.
Jetbead

A 4-5-6-10-13
B 2

RHUS - Sumac

Rhus canadensis 539 Rhus canadensis Marsh.
Fragrant Sumac

A 2-17
B 3

Rhus copallina 537 Rhus copallina L.
Shining Sumac

A W-4-7-17-b-h

Rhus cotinus 535 Cotinus coggygria Scop.
Common Smoketree

A 1-4-10-13-15-18-20-24

Not hardy in Zone B.

Rhus glabra 537 Rhus glabra L.
Smooth Sumac

A W-4-7-26-b
B W-b

Rhus typhina 537 Rhus typhina L.
Staghorn Sumac

A W-1-6-7-8-10-15-17-18-22-24-b-c-e-h-i
B W-7-8-9-a-h-j
C W-b
D W-1-2-d

Rhus typhina laciniata 537 Rhus typhina L.
Shredded Sumac var. laciniata Wood.

A 6-21-b
B 8

RIBES - Gooseberry, Currant

Should not be used where there is White Pine as this group serves as the alternate host of the white pine blister-rust.

Ribes cynosbati 313 Ribes cynosbati L.
Pasture Gooseberry

A W-26-h
B W-b

Ribes odoratum 303 Ribes odoratum Wendl,
Golden Currant

A 1-2-12-15-19-27-b
B 2-7-8-a-b
C
D 1-2-3

Ribes vulgare 308 Ribes sativum Syme.
Common Red Currant

A 8-9-10-24-b-c-h-i
B 7-8-a

ROBINIA - Locust

Robinia hispida 507 Robinia hispida L.
Rose-acacia

A 1-6-9-11-15

Robinia hispida "Standards" 507 Robinia hispida L.
Rose-acacia

A 6-9-19
B 4

Robinia pseudoacacia 505 Robinia pseudoacacia L.
Common Locust

A W-1-6-10-15-17-24-26-b-c-h-i
B W-2-7-a-b-j
C 1
D 2

Robinia viscosa 507 Robinia viscosa Vent.
Clammy Locust

A 17-21-Winterport-Surrey-c-i
B 7

ROSA - Rose

Rosa blanda — 443 — Rosa blanda Ait.
Meadow Rose

A
B W-8-b
C
D W-a-b-d

Rosa cinnamomea — 443 — Rosa cinnamomea L.
Cinnamon Rose

A w-17-i
B a-b

Rosa "F. J. Grootendorst" — -- — ----------

A 1-4-8-9-21
B 7-8
C
D 2

A cross between R. rugosa and R. H. polyantha.

Rosa foetida harisoni — 449 — x Rosa Harisonii Rivers.
Harison's Yellow (R. foetida x spinosissima)

A 1-4-6-24-26-27
B 4-7
C 1-2
D 1-2-3

Rosa hugonis — 448 — Rosa Hugonis Hemsl.
Hugonis Rose

A 1-6-7-19-21-24-26
B 7

Rosa humilis — 441 — Rosa carolina L.
Pasture Rose

A W-17-b-c-i
B W-a-b
C b

Rosa lucida 440 Rosa virginiana Mill.
Virginia Rose

A W-8-24-a-b-c-h-i
B W-a

Rosa nitida 441 Rosa nitida Willd.
Bristly Rose

A W-b-c-i
B W-9-a-b

Rosa palustris 440 Rosa palustris Marsh.
Swamp Rose

A W-1-8-17-24-b-c
B W-3-a-b
C W-b

Rosa rubiginosa 438 Rosa eglanteria L.
Sweetbrier

A 5-8-24-b-c-i
B 5-b
C 2

Rosa rubrifolia 440 Rosa rubrifolia Vill.
Redleaf Rose

A 5-6-13-21-24
B 3-7
C
D 3

Rosa rugosa 441 Rosa rugosa Thunb.
Rugosa Rose

A 1-2-4-5-6-7-9-10-13-15-17-18-19-26-27-b-g
B 3-5-7-8
C 1-2
D 1

Rosa spinosissima 447 Rosa spinosissima L.
Scotch Rose

A w-17-b-i

Rosa wichuraiana 433 Rosa Wichuraiana Crep.
Wichurian Rose

A 5

RUBUS - Blackberry, Dewberry, Raspberry

Because of the difficulty of accurate identification, none except R. odoratus were reported in the field survey.

Rubus allegheniensis 419 Rubus allegheniensis Porter.
Allegheny Blackberry

A W-17-b-i
B W-a-b

Rubus hispidus 421 Rubus hispidus L.
Swamp Dewberry

A W-a-b-c-e-i
B W-b

Rubus occidentalis 417 Rubus occidentalis L.
Common Blackcap

A W-b
B W-b

Rubus odoratus 412 Rubus odoratus L.
Flowering Raspberry

A W-1-17-b-c
B W-4-9-a-b
C W-b
D W-2-Mars Hill

SALIX - Willow

Salix babylonica 106 Salix babylonica L.
Babylon Weeping Willow

A 6-8-13-19-24

Salix cinerea 111 Salix cinerea L.
Gray Willow

A 7

Salix cordata 116 Salix cordata Muhlenb.
Heartleaf Willow

A W-b-c-h
B W-a-b
C
D W-a-b-d

Salix discolor 109 Salix discolor Muhlenb.
Pussy Willow

A W-17-c-b-i
B W-7-8-9-a-b-j
C W-b
D W-b-d

Salix fragilis 104 Salix fragilis L.
Brittle Willow

A W-17-b-c
B W-8-9-a-b-j

This willow freely hybridizes with S. alba.

Salix humilis 112 Salix humilis Marsh.
Prairie Willow

A W-b-c-e-i
B W -b
C W-b
D W-b-c

Salix incana 119 Salix incana Schrank.
Rosemary Willow

A 24

Salix pentandra 102 Salix pentandra L.
Laurel Willow

A W-1-2-5-6-7-8-10-13-17-19-21-24-27
B W-3-7
C 2
D 1-2

Salix tristis 112 Salix tristis Ait.
Dwarf Pussy Willow

A c

Salix vitellina 105 Salix alba L.
Golden Willow var. vitellina Stokes.

A W-1-5-6-10-13-17-24-b-i
B W-7-8-9-a-b
C W-2
D W-1-2-3

Salix alba and its variety vitellina can not readily be distinguished. In this study they have been classified as one.

SAMBUCUS - Elder

Sambucus canadensis 796 Sambucus canadensis L.
American Elder

A W-5-6-7-9-10-13-15-18-19-20-b-c-e-h-i
B W-4-7-9-a-b-j
C
D W-1

Sambucus canadensis acutiloba 797 Sambucus canadensis L.
Cutleaf American Elder var. acutiloba Ellw. & Barry.

A 6-10-15-16

Sambucus canadensis aurea — 796 — Sambucus canadensis L. var. aurea Cowell.
Golden American Elder

A 1-2-6-8-10-13-15-20-21
B 8
C
D 1

Sambucus nigra — 796 — Sambucus nigra L.
European Elder

A 1

Sambucus nigra variegata — 796 — Sambucus nigra L. var. alba variegata West.
Variegated Elder

A 19-22

Sambucus pubens — 798 — Sambucus pubens Michx.
Scarlet Elder

A W-6-17-24-b-c-h-i
B W-7-8-a-b
C W-2-b
D W-1-Presque Isle-b-d

Adapted to drier situations than S. canadensis.

SASSAFRAS - Sassafras

Sassafras variifolium — 264 — Sassafras officinale Nees. & Eberm.
Common Sassafras

A w-Wells-Eliot-b

SCIADOPITYS - Umbrella-pine

Sciadopitys verticillata — 27 — Sciadopitys verticillata Sieb. & Zucc.

A 4-6-24-Limerick

SMILAX - Greenbrier

Smilax rotundifolia 80 Smilax rotundifolia L.
Common Greenbrier

A W-17-b

SOLANUM - Nightshade

Solanum dulcamara 783 Solanum Dulcamara L.
Bitter Nightshade

A W-5-15-17-21-24-a-b-c-i
B W-b

SOPHORA - Sophora

Sophora japonica 486 Sophora japonica L.
Chinese Scholartree

A 9

SORBARIA - False-spirea

Sorbaria arborea 350 Sorbaria arborea Schneid.
Tree-spirea

A 24
B
C
D 1

Very hardy.

Sorbaria sorbifolia 349 Sorbaria sorbifolia A. Br.
Ural False-spirea

A w-1-5-6-10-12-17-21-24-26-27-g-i
B w-3-4-7-8
C 2
D 1

SORBUS - Mountain-ash

Sorbus americana 377 Sorbus americana Marsh.
American Mountain-ash

A W-1-10-17-24-b-c-e-f-h-i
B W-a-b
C W-2-b
D W-1-2-3-b-d

Sorbus aucuparia 379 Sorbus Aucuparia L.
European Mountain-ash

A 1-5-6-8-15-24-26-27-b
B w-3-4-7-8-9-a-b

Sorbus aucuparia pendula 379 Sorbus Aucuparia L.
Weeping Mountain-ash var. pendula Kirchn.

A 6-16
B 8

Sorbus quercifolia 380 x Sorbus hybrida L.
Oakleaf Mountain-ash (S. Aucuparia x intermedia)

A 4-5-10-19-21-22-24-26-27
B 8-9-a
C
D 1

SPIRAEA - Spirea

Spiraea billiardi 346 x Spiraea Billiardii Hernicq.
Billiard Spirea (S. Douglasii x salicifolia)

A 5
B
C
D 2

Spiraea bumalda 342 x Spiraea bumalda Burvenich
Bumalda Spirea (S. japonica x albiflora)

A 1-5-6-7-8-9-10-15-20-24-26
B 3-8
C 2
D 1-2

Spiraea bumalda Anthony Waterer 342 Spiraea bumalda Burvenich.
Anthony Waterer Spirea var. "Anthony Waterer"

A 1-2-5-6-8-9-10-15
B 3-7-8-9

Spiraea bumalda froebeli 342 Spiraea bumalda Burvenich.
Froebel Spirea var. Froebeli Rehd.

A 8

Spiraea chamaedryfolia 337 Spiraea chamedryfolia L.
Germander Spirea

A 19
B
C
D 2

Spiraea japonica ovalifolia 342 Spiraea japonica L. f.
White Japanese Spirea var. ovalifolia Franch.

A 9

Often listed as S. callosa alba.

Spiraea latifolia 346 Spiraea latifolia Borkh.
Pink Meadow Spirea

A W-7-17-24-b-e-f-i-c
B W-8-8w-a-b-j
C W-b
D W-1-2-3-b-d

This is an American species usually cataloged as S. salicifolia, which is Asiatic.

Spiraea prunifolia 334 Spiraea prunifolia Sieb. & Zucc.
Bridalwreath

A 6-10-24

Dies back unless protected.

Spiraea thunbergi 335 Spiraea Thunbergii Sieb.
Thunberg Spirea

A 1-2-5-6-8-9-10-12-17-20-21-24-26
B 4-5-7-8
C 1
D 2

Spiraea tomentosa 347 Spiraea tomentosa L.
Hardhack

A W-7-17-24-b-c-h-i
B W-4-8-a-b-j
C W-2-b
D W-2

Spiraea trichocarpa 336 Spiraea trichocarpa Nakai.
Korean Spirea

A 24
B 3
C
D 2

Spiraea trilobata 338 Spiraea trilobata L.
Threelobe Spirea

A 4

Spiraea vanhouttei 338 x Spiraea Vanhouttei
Vanhoutte Spirea (S. cantoniensis x trilobata)

A 1-2-5-9-10-12-15-17-18-20-21-24-26-27
B 3-7-5-4-8-9
C 1-2
D 1-2

Kills back unless protected in Zones C and D.

STEPHANANDRA - Stephanandra

Stephanandra flexuosa 332 Stephanandra incisa Zabel.
Cutleaf Stephanandra

A 2-4-6-8-9-13

Not hardy in Zone B.

SYMPHORICARPOS - Snowberry

Symphoricarpos mollis 811 Symphoricarpus mollis Nutt.
Spreading Snowberry

A 14

Symphoricarpos racemosus laevigatus 811 Symphoricarpus albus Blake.
Garden Snowberry var. laevigatus Blake.

A 1-2-4-6-7-8-9-10-12-13-14-15-17-20-21-24-26-27-b-i
B 2-3-5-b
C 1-2
D 1-2

Symphoricarpos vulgaris 812 Symphoricarpus orbiculatus
Coralberry

A 1-4-6-7-8-9-10-19-24
B 3-8

Season in Zone B is not long enough for Coralberry to develop its attractive fruit.

SYRINGA - Lilac

There are many desirable varieties being offered in the trade. Be sure that these varieties are grafted onto hardy stock.

Syringa chinensis 756 x Syringa chinensis Willd.
Chinese Lilac (S. persica x vulgaris)

A 2-4-5-10-13-15-21-23-24
B 3-5-7-9
C 1
D 1

It is very likely that some plants recorded here were Syringa persica as they are difficult to destinguish when not in bloom. The Chinese Lilac is the more desirable shrub.

Syringa japonica 757 Syringa japonica Decne.
Japanese Tree Lilac

A 6-12-13-19-20-21-23
B 2-5-7-8-9
C 1
D 1-2

Syringa josikaea 752 Syringa Josikaea Jacq.
Hungarian Lilac

A 6-10-19-21
B
C 1-2
D 2

Syringa persica 756 Syringa persica L.
Persian Lilac

A 5-17

Should have the same range as Syringa chinensis.

Syringa villosa 753 Syringa Villosa Vahl.
Late Lilac

A 1-10-19-20-21-24
B 4-8-9
C 2
D 3

Syringa vulgaris 755 Syringa vulgaris L.
Common Lilac

A w-1-2-5-6-10-12-13-15-17-18-20-26-27-b-c-h-i
B w-3-4-5-7-8-9
C 1-2
D 1-2-3

TAXUS - Yew

Taxus canadensis 6 Taxus canadensis Marsh.
Canada Yew

A W-17-22-b-c-e-i
B W-8w-a-b
C W-b
D W-b-d

Requires shade.

Taxus cuspidata 6 Taxus cuspidata Sieb. & Zucc.
Japanese Yew

A 6-8-9-15-22-5
B 3-8
C
D 1

Taxus cuspidata capitata 6 Taxus cuspidata Sieb. & Zucc.
variety

A 6
B 7
C
D 1

Taxus cuspidata nana 6 Taxus cuspidata Sieb. & Zucc.
Dwarf Japanese Yew var. nana Rehd.

A 5-6-7-8-9-10-24
B 2-7

THUJA - Arborvitae

Thuja occidentalis 21 Thuja occidentalis L.
American Arborvitae

A W-1-4-6-7-10-12-15-17-18-24-25-26-27-b-c-e-h-i
B W-3-5-7-8-9-a-b-j
C W-2-b
D W-1-2-3-b-d

Thuja occidentalis globosa 22 Thuja occidentalis L.
American Globe Arborvitae var. globosa Gord.

A 1-9
B 3-7
C
D 1

Thuja occidentalis lutea 21 Thuja occidentalis L.
George Peabody Arborvitae var. lutea Kent.

A 1-6-13-27-Northport
B 3

Thuja occidentalis pyramidalis 22 Thuja occidentalis L.
American Pyramidal Arborvitae var. fastigiata Jaeg.

A 1-6-9-19-21-24-27
B 3-5-7-8
C
D 1

Must be protected or will burn from the winter winds in Zones C and D.

Thuja occidentalis wareana 21 Thuja occidentalis L.
Ware Arborvitae var. robusta Carr.

A 1-4

THYMUS - Thyme

Thymus serpyllum 781 Thymus Serpyllum L.
Mother-of-thyme

A b-c
B 7-b

TILIA - Linden

Tilia americana 615 Tilia glabra Vent.
American Linden

A W-1-5-6-10-15-17-18-24-b-h
B W-4-6-7-b-j
C W-b
D W-1

Tilia cordata 614 Tilia cordata Mill.
Littleleaf European Linden

A 4-9-10-17

Tilia platyphyllos 614 Tilia platyphyllos Scop.
Bigleaf European Linden

A 6-24
B 9
C
D 2

Tilia vulgaris 614 x Tilia vulgaris Hayne.
Common Linden (T. cordata x platyphyllos)

A 4-8-19-b
B 8

TSUGA - Hemlock

Must have protection from strong summer and winter winds. Will not grow in direct exposure to salt-laden winds. Young plants must be sheltered and mulched.

Tsuga canadensis 39 Tsuga canadensis Carr.
Canada Hemlock

A W-1-4-5-6-7-10-15-17-19-20-22-24-b-c-e-h-i
B W-3-4-5-7-8-9-b-j
C w-1-2-b
D 1-2

Tsuga canadensis pendula 39 Tsuga canadensis Carr. var. pendula Beiss.
Sargent Weeping Hemlock

A 10-20-South Gorham

Tsuga caroliniana 39 Tsuga caroliniana Engelm.
Carolina Hemlock

A 5-10-24

Tsuga heterophylla 39 Tsuga heterophylla Sarg.
Western Hemlock

A Jackson's Nursery, North Scarboro.

Tsuga sieboldi 38 Tsuga Sieboldii Carr.
Siebold Hemlock

A 7-8-24

ULMUS - Elm

Ulmus americana 184 Ulmus americana L.
American Elm

A W-1-5-6-10-15-17-19-24-26-b-h-i
B W-5-7-a-b-j
C W-1-b
D W-2-3-d

Ulmus fulva 185 Ulmus fulva Michx.
Slippery Elm

A W-b-h
B W-5-7

Ulmus glabra 185 Ulmus glabra Huds.
Scotch Elm

A 19

Ulmus glabra camperdowni 186 Ulmus glabra Huds.
Camperdown Elm var. comperdownii Rehd.

A 4-10-15
B 3-6-7-8-9
C 1

Ulmus pumila 190 Ulmus pumila L.
Dwarf Asiatic Elm

A 25

VACCINIUM - Blueberry

Vaccinium canadense 726 Vaccinium canadense Kalm.
Canada Blueberry

A W-17-b-c-e-h-i
B W-a-b-j
C W-b
D W-b-d

Vaccinium corymbosum 727 Vaccinium corymbosum L.
Highbush Blueberry

A W-1-7-8-10-17-18-19-24-b-c-e
B W-3-8w-a-b-j
C W-b
D 1

Vaccinium macrocarpon 730 Vaccinium macrocarpum Ait.
Cranberry

A W-17-b-c-f-i
B W-b
C
D W-d

Vaccinium oxycoccus 730 Vaccinium Oxycoccus L.
Small Cranberry

A W-a-b-c-e-f-i
B W-a-b
C
D W-b

Vaccinium pennsylvanicum 727 Vaccinium pennsylvanicum Lam.
Lowbush Blueberry

A W-17-18-25-b-c-e-f-i
B W-a-b-j
C W-b
D W-a-b-d

Vaccinium stamineum 725 Vaccinium stamineum L.
Deerberry

A
B a

Vaccinium vacillans 727 Vaccinium vacillans Soland.
Dryland Blueberry

A W-17-b
B W-a-b
C W-b

VIBURNUM - Viburnum

Viburnum acerifolium 809 Viburnum acerifolium L.
Mapleleaf Viburnum

A W-17-20-24-b-c-i
B W-8-a-b-j

Viburnum alnifolium 803 Viburnum alnifolium Marsh.
Hobblebush

A W-17-24-b-c-e-i
B W-8w-a-b
C W-b
D W-1-b

Viburnum cassinoides 804 Viburnum cassinoides L.
Withe-rod

A W-1-5-7-8-10-13-17-20-21-23-24-b-c-e-i
B W-3-8-a-b-j
C W-2
D W-1-b-d

Viburnum dentatum 808 Viburnum dentatum L.
Arrowwood

A W-2-5-6-7-9-10-17-18-19-20-24-b-c-i
B W-4-8-a-b-j
C W-b
D W-1-d

Viburnum lantana 801 Viburnum Lantana L.
Wayfaring-tree

A 3-5-8-23-24
B 8

Viburnum lentago 804 Viburnum Lentago L.
Nannyberry

A W-1-17-20-b
B W-7-a-b

Viburnum opulus 810 Viburnum Opulus L.
European Cranberrybush

A W-1-2-5-6-8-10-17-18-20-21-24-26-27-b
B W-2-7-8-a-b
C W-2-b-j
D W-1-2-3-b

Viburnum opulus nanum 810 Viburnum Opulus L.
Dwarf Cranberrybush variety

A 6

Viburnum opulus sterile 810 Viburnum Opulus L.
Common Snowball var. sterile DC.

A 1-4-10-12-17-24-27
B 7-8

Viburnum prunifolium 805 Viburnum prunifolium L.
Blackhaw

A w-4-6w-8

Viburnum scabrellum — 808 — Viburnum scabrellum Chapm.

A 24

Viburnum sieboldi — 800 — Viburnum Sieboldii Miq.
Siebold Viburnum

A 5-6-17-b
B 3

Viburnum tomentosum — 803 — Viburnum tomentosum Thunb.
Doublefile Viburnum

A 2-6-9-10-20-24-25
B 3-5-7
C
D 1

One of the hardiest.

Viburnum tomentosum plicatum — 804 — Viburnum tomentosum Thunb. var. sterile K. Koch.
Japanese Snowball

A 1

Viburnum venosum — 808 — Viburnum pubescens Pursh.
Veiny Viburnum

A
B 8

VINCA - Periwinkle

Vinca minor — 770 — Vinca minor L.
Common Periwinkle

A 1-5-8-10-20-21
B
C 1
D 1

VITIS - Grape

Vitis aestivalis 604 Vitis aestivalis Michx.
Summer Grape

A
B 2-9
C 1

Vitis cordifolia 601 Vitis cordifolia Michx.
Frost Grape

A
B a

Vitis labrusca 606 Vitis labrusca L.
Fox Grape

A W-1-4-6w-10-15-12-18-19-24-26-b
B W-4-a-b
C 1

Vitis vulpina 602 Vitis vulpina L.
Riverbank Grape

A W-21-22-24-b
B W-8-b

WEIGELA - Weigela

Weigela hybrida 816 Diervilla spp.
Horticultural varieties of Weigela

A 1-2-4-5-6-7-9-10-12-13-15-18-19-20-21-24-26-27-b
B 1-2-3-5-7-9-a

Curtis includes in this group:

W. amabilis - Rose Weigela
W. floribunda - Crimson Weigela
W. hybrida candida - Snow Weigela
W. Hybrida - Eva Rathke
W. rosea - Pink Weigela

Kills back to snow in Zones C and D.

Weigela rosea variegata 817 Diervilla florida Sieb. & Zucc. var. variegata Bean.
Variegated Pink Weigela

A 19-20-24

WISTERIA - Wisteria

Wisteria sinensis 504 Wistaria sinensis
Chinese Wisteria

A 1-2-5-10-13-15-19-21-22
B 2-3-4-7-8-9
C 1
D 2

YUCCA - Yucca

Yucca filamentosa 76 Yucca filamentosa L.
Common Yucca

A 6

ZANTHORHIZA - Yellowroot

Zanthorhiza apiifolia 215 Zanthorhiza apiifolia L'Herit.
Yellowroot

A 2-8-17-24
B 3

Very hardy.

CLASSIFICATION OF DATA

Planting List for Zone A

Abies balsamea	Balsam Fir
Abies concolor	White Fir
Abies fraseri	Fraser Fir
Abies homolepis	Nikko Fir
Abies nordmanniana	Nordmann Fir
Abies veitchi	Veitch Fir
Acanthopanax pentaphyllum	-------
Acer campestre	Hedge Maple
Acer dasycarpum	Silver Maple
Acer ginnala	Amur Maple
Acer negundo	Boxelder
Acer nigrum	Black Maple
Acer palmatum	Japanese Maple
Acer palmatum ornatum	Spiderleaf Maple
Acer pennsylvanicum	Striped Maple
Acer platanoides	Norway Maple
Acer platanoides aureo-marginatum	-------
Acer platanoides schwedleri	Schwedler Maple
Acer pseudoplatanus	Sycamore Maple
Acer pseudoplatanus variegatus	-------
Acer rubrum	Red Maple
Acer saccharum	Sugar Maple
Acer saccharinum wieri	Wier Maple
Acer spicatum	Mountain Maple
Acer tataricum	Tatarian Maple
Actinidia arguta	Bower Actinidia
Aesculus glabra	Ohio Buckeye
Aesculus hippocastanum	Horsechestnut
Akebia quinata	Fiveleaf Akebia
Alnus incana	Speckled Alder
Alnus mitchelliana	American Green Alder
Alnus rugosa	Hazel Alder
Amelanchier canadensis	Downy Shadblow
Amelanchier laevis	Allegheny Shadblow
Amelanchier oblongifolia	Thicket Shadblow
Amelanchier stolonifera	Running Shadblow
Ampelopsis quinquefolia	Virginia Creeper
Ampelopsis tricuspidata	Japanese Creeper
Amygdalus persica	Peach
Andromeda glaucophylla	Downy Bog-rosemary
Andromeda polifolia	Bog-rosemary
Aralia spinosa	Devils-walkingstick
Arctostaphylos uva-ursi	Bearberry
Aristolochia sipho	Dutchmans-pipe

Aronia atropurpurea	Purple Chokeberry
Aronia melanocarpa	Black Chokeberry
Artemisia absinthium	Common Wormwood
Azalea calendulacea	Flame Azalea
Azalea kaempferi	Torch Azalea
Azalea mollis	Chinese Azalea
Azalea quinquefolia	Cork Azalea
Azalea vaseyi	Pinkshell Azalea
Azalea viscosa	Swamp Azalea
Azalea yodogawa	Yodogawa Azalea
Berberis thunbergi	Japanese Barberry
Berberis thunbergi atropurpurea	Purpleleaf Japanese Barberry
Berberis vulgaris	European Barberry
Berberis vulgaris atropurpurea	Purple Barberry
Betula lenta	Sweet Birch
Betula lutea	Yellow Birch
Betula nigra	River Birch
Betula papyrifera	Canoe Birch
Betula pendula gracillis	Cutleaf Weeping Birch
Betula pendula purpurea	Purpleleaf White Birch
Betula populifolia	Gray Birch
Bignonia radicans	Trumpetcreeper
Buddleia davidi	Orange-eye Butterflybush
Caragana arborescens	Siberian Pea-tree
Carpinus caroliniana	American Hornbeam
Castanea dentata	American Chestnut
Catalpa bignonioides	Common Catalpa
Catalpa bignonioides nana	Umbrella Catalpa
Catalpa speciosa	Western Catalpa
Ceanothus americanus	Jersey-tea
Celastrus orbiculatus	Oriental Bittersweet
Celastrus scandens	American Bittersweet
Cephalanthus occidentalis	Common Buttonbush
Cercidiphyllum japonicum	Katsura-tree
Chamaecyparis obtusa	Hinoki Cypress
Chamaecyparis obtusa nana	Dwarf Hinoki Cypress
Chamaecyparis pisifera	Sawara Retinospora
Chamaecyparis pisifera aurea	Golden Sawara Retinospora
Chamaecyparis pisifera filifera	Thread Retinospora
Chamaecyparis pisifera filifera aurea	Golden Thread Retinospora
Chamaecyparis pisifera squarrosa	Moss Retinospora
Chamaecyparis thyoides	Whitecedar
Chamaedaphne calyculata	Leatherleaf
Chimaphila umbellata	Common Pipsissewa
Chiogenes hispidula	Creeping Snowberry
Chionanthus virginica	White Fringetree
Cladrastis lutea	Yellow-wood
Clematis jackmani	Jackman Clematis
Clematis paniculata	Sweet Auburn Clematis

Clematis lawsoniana henryi	Henry Clematis
Clematis tangutica	Bolden Clematis
Clematis virginiana	Virgins-bower
Clematis vitalba	Travelers-joy
Clethra alnifolia	Summersweet
Colutea arborescens	Common Bladder-senna
Comptonia asplenifolia	Sweetfern
Corema conradi	Broom-crowberry
Cornus alba argenteo-variegata	Silverblotch Dogwood
Cornus alba sibirica	Coral Dogwood
Cornus alternifolia	Pagoda Dogwood
Cornus amomum	Silky Dogwood
Cornus florida	Flowering Dogwood
Cornus mas	Cornelian-cherry
Cornus paniculata	Gray Dogwood
Cornus purpusi	Pale Dogwood
Cornus rugosa	Roundleaf Dogwood
Cornus sanguinea	Bloodtwig Dogwood
Cornus sanguinea viridissima	Greentwig Dogwood
Cornus stolonifera	Red-osier Dogwood
Cornus stolonifera flaviramea	Goldentwig Dogwood
Corylus americana	American Hazelnut
Corylus avellana atropurpurea	Purple Filbert
Corylus rostrata	Beaked Hazelnut
Cotoneaster acutifolia	Peking Cotoneaster
Cotoneaster divaricata	Spreading Cotoneaster
Cotoneaster horizontalis	Rock Cotoneaster
Crataegus occinea	Thicket Hawthorn
Crataegus cordata	Washington Hawthorn
Crataegus crusgalli	Cockspur Thorn
Crataegus oxyacantha	English Hawthorn
Crataegus oxyacantha pauli	Paul English Hawthorn
Crataegus punctata	Dotted Hawthorn
Cydonia japonica	Flowering Quince
Cydonia oblonga	Common Quince
Cytisus scoparius	Scotch Broom
Daphne cneorum	Rose Daphne
Daphne mezereum	February Daphne
Deutzia gracilis	Slender Deutzia
Deutzia lemoinei	Lemoine Deutzia
Deutzia scabra and varieties	Fuzzy Deutzia
Diervilla trifida	Dwarf Bush-honeysuckle
Dirca palustris	Leatherwood
Elaeagnus angustifolia	Russian-olive
Elaeagnus longipes	Cherry Elaeagnus
Empetrum nigrum	Crowberry
Epigaea repens	Trailing-arbutus
Euonymus alatus	Winged Euonymus
Euonymus americanus	Brook Euonymus

Enonymus atropurpureus	Wahoo
Euonymus bungeanus	Winterberry Euonymus
Euonymus europaeus	European Burningbush
Euonymus latifolius	Broadleaf Burningbush
Euonymus radicans	Wintercreeper
Euonymus radicans acutus	Sharpleaf Wintercreeper
Euonymus radicans minimus	Baby Wintercreeper
Euonymus radicans vegetus	Bigleaf Wintercreeper
Exochorda grandiflora	Common Pearlbush
Fagus americana	American Beech
Fagus sylvatica	European Beech
Fagus sylvatica incisa	Cutleaf Beech
Fagus sylvatica pendula	Weeping Beech
Fagus sylvatica purpurea	Purple Beech
Forsythia intermedia	Border Forsythia
Forsythia suspensa	Weeping Forsythia
Forsythia suspensa fortunei	Fortune Forsythia
Forsythia viridissima	Greenstem Forsythia
Fraxinum americana	White Ash
Fraxinus excelsior	European Ash
Fraxinus lanceolata	Green Ash
Fraxinus nigra	Black Ash
Fraxinus pennsylvanica	Red Ash
Gaultheria procumbens	Wintergreen
Gaylussacia baccata	Black Huckleberry
Genista tinctoria	Woadwaxen
Ginkgo biloba	Maidenhair-tree
Gleditsia triacanthos	Common Honeylocust
Hamamelis virginiana	Common Witch-hazel
Hicoria ovata	Shagbark Hickory
Hydrangea arborescens grandiflora	Snowhill Hydrangea
Hydrangea paniculata grandiflora	Peegee Hydrangea
Hydrangea petiolaris	Climbing Hydrangea
Hypericum aureum	Golden St.Johnswort
Hypericum densiflorum	----------
Hypericum patulum henryi	Henry Hypericum
Ilex laevigata	Smooth Winterberry
Ilex verticillata	Common Winterberry
Juglans cinerea	Butternut
Jugland nigra	Black Walnut
Juniperus chinensis	Chinens Juniper
Juniperus chinensis pfitzeriana	Pfitzer Juniper
Juniperus communis	Common Juniper
Juniperus communis depressa	Prostrate Juniper
Juniperus communis hibernica	Irish Juniper
Juniperus communis suecica	Swedish Juniper
Juniperus excelsa stricta	Spiny Greek Juniper
Juniperus horizontalis	Creeping Juniper
Juniperus horizontalis douglasi	Waukegan Juniper

Juniperus sabina	Savin Juniper
Juniperus virginiana	Redcedar
Juniperus virginiana glauca	Silver Redcedar
Kalmia angustifolia	Lambkill
Kalmia latifolia	Mountain-laurel
Kalmia polifolia	Bog Kalmia
Kerria japonica	Kerria
Kerria japonica argenteo-variegata	Silver Kerria
Kerria japonica florepleno	Double Kerria
Kolkwitzia amabilis	Beautybush
Laburnum alpinum	Scotch Laburnum
Laburnum vulgare	Goldenchain
Larix europaea	European Larch
Larix laricina	American Larch
Larix leptolepis	Japanese Larch
Ledum groenlandicum	True Labrador-tea
Leiophyllus buxifolium prostratum	Allegheny Sandmyrtle
Lespedeza formosa	Purple Bushclover
Leucothoe catesbaei	Drooping Leucothoe
Ligustrum amurense	Amur Privet
Ligustrum ibolium	Ibolium Privet
Ligustrum ibota	Ibota Privet
Ligustrum ibota regelianum	Regel Privet
Ligustrum lodense	Lodense Privet
Ligustrum vulgare	European Privet
Linnaea borealis americana	American Twinflower
Liriodendron tulipifera	Tuliptree
Lonicera bella	Belle Honeysuckle
Lonicera canadensis	American Fly Honeysuckle
Lonicera dioica	Limber Honeysuckle
Lonicera japonica halliana	Hall Japanese Honeysuckle
Lonicera korolkowi floribunda	Broad Blueleaf Honeysuckle
Lonicera maacki	Amur Honeysuckle
Lonicera morrowi	Morrow Honeysuckle
Lonicera periclymenum	Woodbine
Lonicera ruprechtinan	Mancurian Honeysuckle
Lonicera sempervirens	Trumpet Honeysuckle
Lonicera tatarica	Tatarian Honeysuckle
Lonicera xylosteum	European Fly Honeysuckle
Lycium halimifolium	Common Matrimony-vine
Lyonia ligustrina	He-huckleberry
Magnolia acuminata	Cucumbertree
Malus arnoldiana	Arnold Crab
Malus baccata	Siberian Crab
Malus coronaria	Wild Sweet Crab
Malus floribunda	Japanese Flowering Crab
Malus floribunda purpurea	Purple Crab
Malus Halliana	Hall Crab
Malus ioensis plena	Bechtel Crab
Malus niedzwetzkyana	Redvein Crab
Malus robusta	Cherry Crab

Malus sargenti	Sargent Crab
Malus scheideckeri	Scheidecker Crab
Malus sylvestris	Apple
Malus toringoides	Cutleaf Crab
Mitchella repens	Partridgeberry
Morus alba	White Mulberry
Morus alba pendula	Weeping Mulberry
Myrica carolinensis	Northern Bayberry
Myrica gale	Sweetgale
Nemopanthus mucronatus	Mountain-holly
Nyssa sylvatica	Tupelo
Ostrya virginiana	American Hophornbeam
Oxydendrum arboreum	Sourwood
Pachysandra terminalis	Japanese Pachysandra
Philadelphus aureus	Golden Mockorange
Philadelphus coronarius	Sweet Mockorange
Philadelphus grandiflorus	Big Scentless Mockorange
Philadelphus inodorus	Scentless Mockorange
Philadelphus lemoinei	Lemoine Mockorange
Physocarpus opulifolius	Common Ninebark
Physocarpus opulifolius luteus	Goldleaf Ninebark
Picea canadensis	White Spruce
Picea engelmanni	Engelmann Spruce
Picea excelsa	Norway Spruce
Picea excelsa pendula	Weeping Norway Spruce
Picea glauca conica	Dwarf Alberta Spruce
Picea mariana	Black Spruce
Picea orientalis	Oriental Spruce
Picea pungens	Colorado Spruce
Picea pungens glauca	Blue Colorado Spruce
Picea pungens glauca pendula	Weeping Blue Spruce
Picea pungens kosteri	Koster Blue Spruce
Picea rubra	Red Spruce
Pieris floribunda	Mountain Andromeda
Pinus banksiana	Jack Pine
Pinus cembra	Swiss Stone Pine
Pinus montana	Swiss Mountain Pine
Pinus montana mughus	Mugho Pine
Pinus nigra	Austrian Pine
Pinus parviflora	Japanese White Pine
Pinus ponderosa	Western Yellow Pine
Pinus resinosa	Red Pine
Pinus rigida	Pitch Pine
Pinus strobus	White Pine
Pinus sylvestris	Scotch Pine
Platanus occidentalis	American Planetree
Platanus orientalis	European Planetree
Polygonum auberti	China Fleecevine
Populus alba	White Poplar

Populus balsamifera	Balsam Poplar
Populus candicans	Balm-of-Gilead Poplar
Populus eugenei	Carolina Poplar
Populus grandidentata	Largetooth Aspen
Populus nigra italica	Lombardy Poplar
Populus suaveolens	Mongolian Poplar
Populus tremuloides	Quaking Aspen
Potentilla fruticosa	Shrubby Cinquefoil
Prunus americana	American Plum
Prunus avium	Mazzard
Prunus cerasifera	Myrobalan Plum
Prunus cerasifera pissardi	Purpleleaf Plum
Prunus cerasus	Sour Cherry
Prunus glandulosa plena	Flowering Almond
Prunus maritima	Beach Plum
Prunus nigra	Canada Plum
Prunus pennsylvanica	Pin Cherry
Prunus pumila	Sand Cherry
Prunus serotina	Black Cherry
Prunus serrulata	Oriental Cherry
Prunus subhirtella pendula	Shidare-higan
Prunus tomentosa	Nanking Cherry
Prunus triloba	Flowering Plum
Prunus virginiana	Common Chokecherry
Pseudotsuga douglasi	Douglas fir
Ptelea trifoliata	Common Hoptree
Pyrus communis	Common Pear
Quercus alba	White Oak
Quercus bicolor	Swamp White Oak
Quercus coccinea	Scarlet Oak
Quercus ilicifolia	Scrub Oak
Quercus imbricaria	Shingle Oak
Quercus macrocarpa	Mossycup Oak
Quercus palustris	Pin Oak
Quercus primus	Chestnut Oak
Quercus robur	English Oak
Quercus robur concordia	-------
Quercus rubra ambigua	Northern Red Oak
Quercus velutina	Black Oak
Rhamnus cathartica	Common Buchthorn
Rhamnus frangula	Glossy Buckthorn
Rhododendron carolinianum	Carolina Rhododendron
Rhododendron catawbiense	Catawba Rhododendron
Rhododendron "hybrids"	Hybrid Rhododendrons
Rhododendron maximum	Rosebay Rhododendron
Rhodora canadensis	Rhodora
Rhodotypos kerrioides	Jetbead
Rhus canadensis	Fragrant Sumac
Rhus copallina	Shining Sumac
Rhus cotinus	Common Smoketree

Rhus copallina	Shining Sumac
Rhus cotinus	Common Smoketree
Rhus glabra	Smooth Sumac
Rhus typhina	Staghorn Sumac
Rhus typhina laciniata	Shredded Sumac
Ribes cynosbati	Pasture Gooseberry
Ribes odoratum	Golden Currant
Ribes vulgare	Common Red Currant
Rhobinia hispida	Rose-acacia
Roginia hispida "Standards"	Rose-acacia
Robinia pseudoacacia	Common Locust
Robinia viscosa	Clammy Locust
Rosa blanda	Meadow Rose
Rosa cinnamomea	Cinnamon Rose
Rosa "F. J. Grootendorst"	-------
Rosa foetida harisoni	Harison's Yellow
Rosa hugonis	Hugonis Rose
Rosa humilis	Pasture Rose
Rosa lucida	Virginia Rose
Rosa nitida	Bristly Rose
Rosa palustris	Swamp Rose
Rosa rubiginosa	Sweetbrier
Rosa rubrifolia	Redleaf Rose
Rosa rugosa	Rugosa Rose
Rosa spinosissima	Scotch Rose
Rosa wichuraiana	Wichurian Rose
Rubus allegheniensis	Allegheny Blackberry
Rubus hispidus	Swamp Dewberry
Rubus occidentalis	Common Blackcap
Rubus odoratus	Flowering Raspberry
Salix babylonica	Babylon Weeping Willow
Salix cinerea	Gray Willow
Salix cordata	Heartleaf Willow
Salix discolor	Pussy Willow
Salix fragilis	Brittle Willow
Salix humilis	Prairie Willow
Salix incana	Rosemary Willow
Salix pentandra	Laurel Willow
Salix tristis	Dwarf Pussy Willow
Salix vitellina	Golden Willow
Sambucus canadensis	American Elder
Sambucus canadensis acutiloba	Cutleaf American Elder
Sambucus canadensis aurea	Golden American Elder
Sambucus nigra	European Elder
Sambucus nigra variegata	Variegated Elder
Sambucus pubens	Scarlet Elder
Sassafras variifolium	Common Sassfras
Sciadopitys verticillata	Umbrella-pine

Smilax rotundifolia	Common Greenbrier
Solanum dulcamara	Bitter Nightshade
Sophora japonica	Chinese Scholartree
Sorbaria arborea	Tree-spirea
Sorbaria sorbifolia	Ural False-spirea
Sorbus americana	American Mountain-ash
Sorbus aucuparia	European Mountain-ash
Sorbus aucuparia pendula	Weeping Mountain-ash
Sorbus quercifolia	Oakleaf Mountain-ash
Spiraea billiardi	Billiard Spirea
Spiraea bumalda	Bumalda Spirea
Spiraea bumalda Anthony Waterer	Anthony Waterer Spirea
Spiraea bumalda froebeli	Froebel Spirea
Spiraea chamaedryfolia	Germander Spirea
Spiraea japonica ovalifolia	White Japanese Spirea
Spiraea latifolia	Pink Meadow Spirea
Spiraea thunbergi	Thunberg Spirea
Spiraea tomentosa	Hardhack
Spiraea trichorcarpa	Korean Spirea
Spiraea trilobata	Threelobe Spirea
Spiraea vanhouttei	Vanhoutte Spirea
Stephanandra flexuosa	Cutleaf Stephanandra
Symphoricarpos mollis	Spreading Snowberry
Symphoricarpos racemosus laevigatus	Garden Snoweberry
Symphoricarpos vulgaris	Coralberry
Syringa chinensis	Chinene Lilac
Syringa japonica	Japanese Tree Lilac
Syringa josikaea	Hungarian Lilac
Syringa persica	Persian Lilac
Syringa villosa	Late Lilac
Syringa vulgaris	Common Lilac
Taxus canadensis	Canada Yew
Taxus cuspidata	Japanese Yew
Taxus cuspidata capitata	-------
Taxus cuspidata nana	Dwarf Japanese Yew
Thuja occidentalis	American Arborvitae
Thuja occidentalis globosa	American Globe Arborvitae
Thuja occidentalis lutea	George Peabody Arborvitae
Thuja occidentalis pyramidalis	American Pyramidal Arborvitae
Thuja occidnetanis wareana	Ware Arborvitae
Thymus serpyllum	Mother-of-thyme
Tilia americana	American Linden
Tilia cordata	Littleleaf European Linden
Tilia platyphyllos	Bigleaf European Linden
Tilia vulgaris	Common Linden

Tsuga canadensis	Canada Hemlock
Tsuga canadensis pendula	Sargent Weeping Hemlock
Tsuga caroliniana	Carolina Hemlock
Tsuga sieboldi	Siebold Hemlock
Ulmus americana	American Elm
Ulmus fulva	Slippery Elm
Ulmus glabra	Scotch Elm
Ulmus glabra camperdowni	Camperdown Elm
Ulmus pumila	Dwarf Asiatic Elm
Vaccinium canadense	Canada Blueberry
Vaccinium corymbosum	Highbush Blueberry
Vaccinium macrocarpon	Cranberry
Vaccinium oxycoccus	Small Cranberry
Vaccinium pennsylvanicum	Lowbush Glueberry
Vaccinium stamineum	Deerberry
Vaccinium vacillans	Dryland Blueberry
Viburnum acerifolium	Mapleleaf Viburnum
Viburnum alnifolium	Hobblebush
Viburnum cassinoides	Withe-rod
Viburnum dentatum	Arrowwood
Viburnum lantana	Wayfaring tree
Viburnum lentago	Nannyberry
Viburnum opulus	European Cranberrybush
Viburnum opulus nanum	Dwarf Cranberrybush
Viburnum opulus sterile	Common Snowball
Viburnum prunifolium	Blackhaw
Viburnum scabrellum	-------
Viburnum sieboldi	Siebold Viburnum
Viburnum tomentosum	Doubblefile Viburnum
Viburnum tomentosum plicatum	Japanese Snowball
Viburnum venosum	Veiny Viburnum
Vinca minor	Common Periwinkle
Vitis aestivalis	Summer Grape
Vitis labrusca	Fox Grape
Vitis vulpina	Riverbank Grape
Weigela hybrida	Horticultural varieties of Weigela
Weigela rosea variegata	Variegated Pink Weigela
Wisteria sinensis	Chinese Wisteria
Yucca filamentosa	Common Yucca
Zanthorhiza apiifolia	Yellowroot

Planting List for Zone B

Abies balsamea	Balsam Fir
Abies concolor	White Fir
Abies fraseri	Fraser Fir
Abies veitchi	Veitch Fir
Acanthopanax pentaphyllum	-------
Acer dasycarpum	Silver Maple
Acer ginnala	Amur Maple
Acer negundo	Boxelder
Acer nigrum	Black Maple
Acer pennsylvanicum	Striped Maple
Acer platanoides	Norway Maple
Acer platanoides schwedleri	Schwedler Maple
Acer rubrum	Red Maple
Acer saccharum	Sugar Maple
Acer saccharinum wieri	Wier Maple
Acer spicatum	Mountain Maple
Actinidia arguta	Bower Actinidia
Aesculus glabra	Ohio Buckeye
Aesculus hippocastanum	Horsechestnut
Alnus incana	Speckled Alder
Alnus mitchelliana	American Green Alder
Alnus rugosa	Hazel Alder
Amelanchier canadensis	Downy Shadblow
Amelanchier laevis	Allegheny Shadblow
Amelanchier stolonifera	Running Shadblow
Ampelopsis quinquefolia	Virginia Creeper
Ampelopsis tricuspidata	Japanese Creeper
Andromeda glaucophylla	Downy Bog-rosemary
Andromeda polifolia	Bog-rosemary
Aralia spinosa	Devils-walkingstick
Arctostaphylos uva-ursi.	Bearberry
Aristolochia sipho	Dutchmans-pipe
Aronia atropurpurea	Purple Chokeberry
Aronia melanocarpa	Black Chokeberry
Artemisia absinthium	Common Wormwood
Azalea calendulacea	Flame Azalea
Azalea quinquefolia	Cork Azalea
Azalea viscosa	Swamp Azalea
Berberis thunbergi	Japanese Barberry
Berberis thunbergi atropurpurea	Purpleleaf Japanese Barberry
Berberis vulgaris	European Barberry
Berberis vulgaris atropurpurea	Purple Barberry
Betula lutea	Yellow Birch
Betula nigra	River Birch
Betula papyrifera	Canoe Birch
Betula pendula gracilis	Cutleaf Weeping Birch
Betula populifolia	Gray Birch

Buddleia davidi	Orange-eye Butterflybush
Caragana arborescens	Siberian Pea-tree
Castanea dentata	American Chestnut
Caenothus americanus	Jersey-tea
Calastrus scandens	American Bittersweet
Cephalanthus occidentalis	Common Buttonbush
Cercidiphyllum japonicum	Katsura-tree
Chamaecyparis pisifera	Sawara Retinospora
Chamaecyparis pisifera aurea	Golden Sawara Retinospora
Chamaecyparis pisifera filifera	Thread Retinospora
Chamaecyparis pisifera filifera aurea	Golden Thread Retinospora
Chamaecyparis pisifera squarrosa	Moss Retinospora
Chamaedaphne calyculata	Leatherleaf
Chimaphila umbellata	Common Pipsissewa
Chiogenes hispidula	Creeping Snowberry
Chionanthus virginica	White Fringetree
Clematis jackmani	Jackman Clematis
Clematis paniculata	Sweet Autumn Clematis
Clematis virginiana	Virgins-bower
Clethra alnifolia	Summersweet
Comptonia asplenifolia	Sweetfern
Cornus alternifolia	Pagoda Dogwood
Cornus amomum	Silky Dogwood
Cornus mas	Cornelian-cherry
Cornus paniculata	Gray Dogwood
Cornus purpusi	Pale Dogwood
Cornus rugosa	Roundleaf Dogwood
Cornus sanguinea	Bloodtwig Dogwood
Cornus sanguinea viridissima	Greentwig Dogwood
Cornus stolonifera	Red-osier Dogwood
Corylus americana	American Hazelnut
Corylus rostrata	Beaked Hazelnut
Cotoneaster divaricata	Spreading Cotoneaster
Crataegus occinea	Thicket Hawthorn
Crataegus crusgalli	Cockspur Thorn
Crataegus oxyacantha	English Hawthorn
Crataegus oxyacantha pauli	Paul English Hawthorn
Crataegus punctata	Dotted Hawthorn
Cydonia japonica	Flowering Quince
Daphne cneorum	Rose Daphne
Daphne mezereum	February Daphne
Deutzia gracilis	Slender Deutzia
Deutzia lemoinei	Lemoine Deutzia
Deutzia scabra and varieties	Fuzzy Deutzia
Diervilla trifida	Dwarf Bush-honeysuckle
Dirca palustris	Leatherwood
Elaeagnus angustifolia	Russian-olive
Elaeagnus longipes	Cherry Elaeagnus
Empetrum nigrum	Crowberry
Epigaea repens	Trailing-arbutus

Euonymus alatus	Winged Euonymus
Euonymus atropurpureus	Wahoo
Euonymus europaeus	European Burningbush
Euonymus radicans	Wintercreeper
Euonymus radicans acutus	Sharpleaf Wintercreeper
Euonymus radicans minimus	Baby Wintercreeper
Euonymus radicans vegetus	Bigleaf Wintercreeper
Exochorda grandiflora	Common Pearlbush
Fagus americana	American Beech
Forsythia intermedia	Border Forsythia
Forsythia suspensa	Weeping Forsythia
Forsythia suspensa fortunei	Fortune Forsythia
Fraxinus americana	White Ash
Fraxinus lanceolata	Green Ash
Fraxinus nigra	Black Ash
Fraxinus pennsylvanica	Red Ash
Gaultheria procumbens	Wintergreen
Gaylussacia baccata	Black Huckleberry
Gleditsia triacanthos	Common Honeylocust
Hamamelis virginiana	Common Witch-hazel
Hicoria ovata	Shagbark Hickory
Hydrangea arborescens grandiflora	Snowhill Hydrangea
Hydrangea paniculata grandiflora	Peegee Hydrangea
Hypericum aureum	Golden St. Johnswort
Ilex laevigata	Smooth Winterberry
Ilex verticillata	Common Winterberry
Juglans cinerea	Butternut
Jugland nigra	Black Walnut
Juniperus chinensis	Chinese Juniper
Juniperus chinensis pfitzeriana	Pfitzer Juniper
Juniperus communis	Common Juniper
Juniperus communis depressa	Prostrate Juniper
Juniperus sabina	Savin Juniper
Juniperus virginiana	Redcedar
Kalmia angustifolia	Lambkill
Kalmia latifolia	Mountain-laurel
Kalmia polifolia	Bog Kalmia
Kerria japonica	Kerria
Kerria japonica argenteo-variegata	Silver Kerria
Kerria japonica florepleno	Double Kerria
Kolkwitzia amabilis	Beautybush
Larix laricina	American Larch
Larix leptolepis	Japanese Larch
Ledum groenlandicum	True Labrador-tea
Ligustrum amurense	Amur Privet
Ligustrum ibota	Ibota Privet
Ligustrum ibota regelianum	Regel Privet
Ligustrum lodense	Lodense Privet
Ligustrum vulgare	European Privet

Linnaea borealis americana	American Twinflower
Lonicera bella	Belle Honeysuckle
Lonicera canadensis	American Fly Honeysuckle
Lonicera dioica	Limber Honeysuckle
Lonicera morrowi	Morrow Honeysuckle
Lonicera sempervirens	Trumpet Honeysuckle
Lonicera tatarica	Tatarian Honeysuckle
Lycium halimifolium	Common Matrimony-vine
Lyonia ligustrina	He-huckleberry
Magnolia acuminata	Cucumbertree
Malus coronaria	Wild Sweet Crab
Malus floribunda	Japanese Flowering Crab
Malus halliana	Hall Crab
Malus ioensis plena	Bechtel Crab
Malus niedzwetzkyana	Redvein Crab
Malus sylvestris	Apple
Malus toringoides	Cutleaf Crab
Mitchella repens	Partridgeberry
Morus alba	White Mulberry
Myrica gale	Sweetgale
Nemopanthus mucronatus	Mountain-holly
Ostrya virginiana	American Hophornbeam
Pachysandra terminalis	Japanese Pachysandra
Philadelphus aureus	Golden Mockorange
Philadelphus coronarius	Sweet Mockorange
Philadelphus lemoinei	Lemoine Mockorange
Physocarpus opulifolius	Common Ninebark
Physocarpus opulifolius luteus	Goldleaf Ninebark
Picea canadensis	White Spruce
Picea engelmanni	Engelmann Spruce
Picea excelsa	Norway Spruce
Picea excelsa pendula	Weeping Norway Spruce
Picea mariana	Black Spruce
Picea pungens	Colorado Spruce
Picea pungens glauca	Blue Colorado Spruce
Picea pungens kosteri	Koster Blue Spruce
Picea rubra	Red Spruce
Pinus banksiana	Jack Pine
Pinus cembra	Swiss Stone Pine
Pinus montana	Swiss Mountain Pine
Pinus montana mughus	Mugho Pine
Pinus nigra	Austrian Pine
Pinus parviflora	Japanese White Pine
Pinus ponderosa	Western Yellow Pine
Pinus resinosa	Red Pine
Pinus rigida	Pitch Pine
Pinus strobus	White Pine
Pinus sylvestris	Scotch Pine
Platanus occidentalis	American Planetree
Populus alba	White Poplar

Populus balsamifera	Balsam Poplar
Populus candicans	Balm-of-Gilead Poplar
Populus eugenei	Carolina Poplar
Populus grandidentata	Largetooth Aspen
Populus nigra italica	Lombardy Poplar
Populus tremuloides	Quaking Aspen
Potentilla fruticosa	Shrubby Cinquefoil
Prunus americana	American Plum
Prunus avium	Mazzard
Prunus cerasifera	Myrobalan Plum
Prunus cerasifera pissardi	Purpleleaf Plum
Prunus cerasus	Sour Cherry
Prunus glandulosa plena	Flowering Almond
Prunus nigra	Canada Plum
Prunus pennsylvanica	Pin Cherry
Prunus pumila	Sand Cherry
Prunus serotina	Black Cherry
Prunus virginiana	Common Chokecherry
Pseudotsuga douglasi	Douglas-fir
Ptelea trifoliata	Common Hoptree
Quercus alba	White Oak
Quercus ilicifolia	Scrub Oak
Quercus macrocarpa	Mossycup Oak
Quercus palustris	Pin Oak
Quercus robur	English Oak
Quercus rubra ambigua	Northern Red Oak
Rhamnus cathartica	Common Buchthorn
Rhododendron carolinianum	Carolina Rhododendron
Rhododendron catawbiense	Catawba Rhododendron
Rhodora canadensis	Rhodora
Rhodotypos kerrioides	Jetbead
Rhus canadensis	Fragrant Sumac
Rhus glabra	Smooth Sumac
Rhus typhina	Staghorn Sumac
Rhus typhina laciniata	Shredded Sumac
Ribes cynosbati	Pasture Gooseberry
Ribes odoratum	Golden Currant
Ribes vulgare	Common Red Currant
Robinia hispida "Standards"	Rose-acacia
Robinia pseudoacacia	Common Locust
Robinia viscosa	Clammy Locust
Rosa blanda	Meadow Rose
Rosa cinnamomea	Cinnamon Rose
Rosa "F. J. Grootendorst"	-------
Rosa foetida harisoni	Harison's Yellow
Rosa hugonis	Hugonis Rose
Rosa humilis	Pasture Rose
Rosa lucida	Virginia Rose
Rosa nitida	Bristly Rose
Rosa palustris	Swamp Rose

Rosa rubiginosa	Sweetbrier
Rosa rubrifolia	Redleaf Rose
Rosa rugosa	Rugosa Rose
Rubus alleghensis	Allegheny Blackberry
Rubus hispidus	Swamp Dewberry
Rubus occidentalis	Common Blackcap
Rubus odoratus	Flowering Raspberry
Salix cordata	Heartleaf Willow
Salix discolor	Pussy Willow
Salix fragillis	Brittle Willow
Salix humilis	Prairie Willow
Salix pentandra	Laurel Willow
Salix vitellina	Golden Willow
Sambucus canadensis	American Elder
Sambucus canadensis aurea	Golden American Elder
Sambucus pubens	Scarlet Elder
Solanum dulcamara	Bitter Nightshade
Sorbaria arborea	Tree-spirea
Sorbaria sorbifolia	Ural False-spirea
Sorbus americana	American Mountain-ash
Sorbus aucuparia	European Mountain-ash
Sorbus aucuparia pendula	Weeping Mountain-ash
Sorbus quercifolia	Oakleaf Mountain-ash
Spiraea billiardi	Billiard Spirea
Spiraea bumalda	Bumalda Spirea
Spiraea bumalda Anthony Waterer	Anthony Waterer Spirea
Spiraea chamaedryfolia	Germander Spirea
Spiraea latifolia	Pink Meadow Spirea
Spiraea thunbergi	Thunberg Spirea
Spiraea tomentosa	Hardhack
Spiraea trichocarpa	Korean Spirea
Spiraea vanhouttei	Vanhoutte Spirea
Symphoricarpos racemosus laevigatus	Garden Snowberry
Symphoricarpos vulgaris	Coralberry
Syringa chinensis	Chinese Lilac
Syringa japonica	Japanese Tree Lilac
Syringa josikaea	Hungarian Lilac
Syringa villosa	Late Lilac
Syringa vulgaris	Common Lilac
Taxus canadensis	Canada Yew
Taxus cuspidata	Japanese Yew
Taxus cuspidata nana	Dwarf Japanese Yew
Thuja occidentalis	American Arborvitae
Thuja occidentalis globosa	American Globe Arborvitae
Thuja occidentalis lutea	George Peabody Arborvitae
Thuja occidentalis pyramidalis	American Pyramidal Arborvitae
Thymus serpyllum	Mother-of-thyme
Tilia americana	American Linden
Tilia platyphyllos	Bigleaf European Linden

Tilia vulgaris	Common Linden
Tsuga canadensis	Canada Hemlock
Ulmus americana	American Elm
Ulmus fulva	Slippery Elm
Ulmus glabra camperdowni	Camperdown Elm
Vaccinium canadense	Canada Blueberry
Vaccinium corymbosum	Highbush Blueberry
Vaccinium macrocarpon	Cranberry
Vaccinium oxycoccus	Small Cranberry
Vaccinium pennsylvanicum	Lowbush Blueberry
Vaccinium stamineum	Deerberry
Vaccinium vacillans	Dryland Blueberry
Viburnum acerifolium	Mapleleaf Viburnum
Viburmum alnifolium	Hobblebush
Viburnum cassinoides	Withe-rod
Viburnum dentatum	Arrowwood
Viburnum lantana	Wayfaring-tree
Viburnum lentago	Nannyberry
Viburnum opulus	European Cranberrybush
Viburnum opulus sterile	Common Snowball
Viburnum sieboldi	Siebold Viburnum
Viburnum tomentosum	Doublefile Viburnum
Viburnum venosum	Veiny Viburnum
Vinca minor	Common Periwinkle
Vitis aestivalis	Summer Grape
Vitis labrusca	Fox Grape
Vitis vulpina	Riverbank Grape
Weigela hybrida	Horticultural varieties of Weigela
Wisteria sinensis	Chinese Wisteria
Zanthorhiza apilifolia	Yellowroot

Planting List for Zone C

Abies balsamea	Balsam Fir
Abies concolor	White Fir
Acanthopanax pentaphyllum	-------
Acer dasycarpum	Silver Maple
Acer ginnala	Amur Maple
Acer negundo	Boxelder
Acer pennsylvanicum	Striped Maple
Acer platanoides	Norway Maple
Acer platanoides schwedleri	Schwedler Maple
Acer rubrum	Red Maple
Acer saccharum	Sugar Maple
Acer saccharinum wieri	Wier Maple
Acer spicatum	Mountain Maple
Actinidia arguta	Bower Actinidia
Aesculus glabra	Ohio Buckeye
Aesculus hippocastanum	Horsechestnut
Alnus incana	Speckled Alder
Alnus mitchelliana	American Green Alder
Amelanchier canadensis	Downy Shadblow
Amelanchier laevis	Allegheny Shadblow
Amelanchier stolonifera	Running Shadblow
Ampelopsis quinquefolia	Virginia Creeper
Ampelopsis tricuspidata	Japanese Creeper
Andromeda glaucophylla	Downy Bog-rosemary
Arctostaphylos uva-ursi	Bearberry
Aristolochia sipho	Dutchmans-pipe
Artemisia absinthium	Common Wormwood
Azalea calendulacea	Flame Azalea
Azalea viscosa	Swamp Azalea
Berberis thunbergi	Japanese Barberry
Berberis thunbergi atropurpurea	Purpleleaf Japanese Barberry
Berberis vulgaris	European Barberry
Berberis vulgaris atropurpurea	Purple Barberry
Betula lutea	Yellow Birch
Betula nigra	River Birch
Betula papyrifera	Canoe Birch
Betula pendula gracilis	Cutleaf Weeping Birch
Betula populifolia	Gray Birch
Buddleia davidi	Orange-eye Butterflybush
Caragana arborescens	Siberian Pea-tree
Carpinus caroliniana	American Hornbeam
Celastrus scandens	American Bittersweet
Cephalanthus occidentalis	Common Buttonbush
Cercidiphyllum japonicum	Katsura-tree
Chamaecyparis pisifera	Sawara Retinospora
Chamaecyparis pisifera filifera	Thread Retinospora

Chamaecyparis pisifera filifera aurea	Golden Thread Retinospora
Chamaecyparis pisifera squarrosa	Moss Retinospora
Chamaedaphne calyculata	Leatherleaf
Chimaphila umbellata	Common Pipsissewa
Chiogenes hispidula	Creeping Snowberry
Clematis jackmani	Jackman Clematis
Clematis paniculata	Sweet Autumn Clematis
Clematis virginiana	Virgins-bower
Cornus alternifolia	Pagoda Dogwood
Cornus amomum	Silky Dogwood
Cornus sanguinea viridissima	Greentwig Dogwood
Cornus stolonifera	Red-osier Dogwood
Corylus rostrata	Beaked Hazelnut
Crataegus oxyacantha	English Hawthorn
Crataegus punctata	Dotted Hawthorn
Cydonia japonica	Flowering Quince
Daphne cneorum	Rose Daphne
Deutzia gracilis	Slender Deutzia
Deutzia lemoinei	Lemoine Deutzia
Deutzia scabra and varieties	Fuzzy Deutzia
Diervilla trifida	Dwarf Bush-honeysuckle
Dirca palustrus	Leatherwood
Elaeagnus angustifolia	Russian-olive
Empetrum nigrum	Crowberry
Epigaea repens	Trailing-arbutus
Euonymus alatus	Winged Euonymus
Euonymus radicans	Wintercreeper
Euonymus radicans minimus	Baby Wintercreeper
Euonymus radicans vegetus	Bigleaf Wintercreeper
Fagus americana	American Beech
Forsythia intermedia	Border Forsythia
Forsythia suspensa	Weeping Forsythia
Fraxinus americana	White Ash
Fraxinus nigra	Black Ash
Gaultheria procumbens	Wintergreen
Gaylussacia baccata	Black Huckleberry
Gleditsia triacanthos	Common Honeylocust
Hamamelis virginiana	Common Witch-hazel
Hydrangea arborescens grandiflora	Snowhill Hydrangea
Hydrangea paniculata grandiflora	Peegee Hydrangea
Hypericum aureum	Golden St. Johnswort
Ilex verticillata	Common Winterberry
Juglans cinerea	Butternut
Juniperus chinensis pfitzeriana	Pfitzer Juniper
Juniperus communis	Common Juniper
Juniperus sabina	Savin Juniper
Kalmia angustifolia	Lambkill
Kalmia latifolia	Mountain-laurel
Kalmia polifolia	Bog Kalmia

Kolkwitzia amabilis	Beautybush
Larix laricina	American Larch
Ledum groenlandicum	True Labrador-tea
Ligustrum ibota	Ibota Privet
Ligustrum lodense	Lodense Privet
Ligustrum vulgare	European Privet
Linnaea borealis americana	American Twinflower
Lonicera bella	Belle Honeysuckle
Lonicera canadensis	American Fly Honeysuckle
Lonicera morrowi	Morrow Honeysuckle
Lonicera sempervirens	Trumpet Honeysuckle
Lonicera tatarica	Tatarian Honeysuckle
Lycium halimifolium	Common Matrimony-vine
Malus floribunda	Japanese Flowering Crab
Malus hallinan	Hall Crab
Malus ioensis plena	Bechtel Crab
Malus niedzwetzkana	Redvein Crab
Malus sylvestris	Apple
Mitchella repens	Partridgeberry
Myrica gale	Sweetgale
Nemopanthus mucronatus	Mountain-holly
Pachysandra terminalis	Japanese Pachysandra
Philadelphus aureus	Golden Mockorange
Philadelphus coronarius	Sweet Mockorange
Philadelphus lemoinei	Lemoine Mockorange
Physocarpus opulifolius	Common Ninebark
Physocarpus opulifolius luteus	Goldleaf Ninebark
Picea canadensis	White Spruce
Picea excelsa	Norway Spruce
Picea mariana	Black Spruce
Picea pungens glauca	Blue Colorado Spruce
Picea rubra	Red Spruce
Pinus banksiana	Jack Pine
Pinus montana mughus	Mugho Pine
Pinus resinosa	Red Pine
Pinus strobus	White Pine
Pinus sylvestris	Scotch Pine
Populus alba	White Poplar
Populus balsamifera	Balsam Poplar
Populus eugenei	Carolina Poplar
Populus grandidentata	Largetooth Aspen
Populus nigra italica	Lombardy Poplar
Populus tremuloides	Quaking Aspen
Potentilla fruticosa	Shrubby Cinquefoil
Prunus americana	American Plum
Prunus cerasifera	Myrobalan Plum
Prunus cerasifera pissardi	Purpleleaf Plum
Prunus cerasus	Sour Cherry
Prunus glandulosa plena	Flowering Almond
Prunus nigra	Canada Plum

Prunus pennsylvanica	Pin Cherry
Prunus pumila	Sand Cherry
Prunus serotina	Black Cherry
Prunus virginiana	Common Chokecherry
Ptelea trifoliata	Common Hoptree
Quercus rubra ambigua	Northern Red Oak
Rhamnus cathartica	Common Buchthorn
Rhododendron catawbiense	Catawba Rhododendron
Rhodora canadensis	Rhodora
Rhus typhina	Staghorn Sumac
Ribes odoratum	Golden Currant
Robinia pseudoacacia	Common Locust
Rosa blanda	Meadow Rose
Rosa "F. J. Grootendorst"	-------
Rosa foetida harisoni	Harison's Yellow
Rosa humilis	Pasture Rose
Rosa palustris	Swamp Rose
Rosa rubiginosa	Sweetbrier
Rosa rubrifolia	Redleaf Rose
Rosa rugosa	Rugosa Rose
Robus odoratus	Flowering Raspberry
Salix cordata	Heartleaf Willow
Salix discolor	Pussy Willow
Salix humilis	Prairie Willow
Salix pentandra	Laurel Willow
Salix vitellina	Golden Willow
Sambucus canadensis	American Elder
Sambucus canadensis aurea	Golden American Elder
Sambucus pubens	Scarlet Elder
Sorbaria arborea	Tree-spirea
Sorbaria sorbifolia	Ural False-spirea
Sorbus americana	American Mountain-ash
Sorbus quercifolia	Oakleaf Mountain-ash
Spiraea billiardi	Billiard Spirea
Spiraea bumalda	Bumalda Spirea
Spiraea chamaedryfolia	Germander Spirea
Spiraea latifolia	Pink Meadow Spirea
Spiraea tomentosa	Hardhack
Spiraea trichocarpa	Korean Spirea
Spiraea vanhouttei	Vanhoutte Spirea
Symphoricarpos racemosus laevigatus	Garden Snowberry
Syringa chinensis	Chinese Lilac
Syringa japonica	Japanese Tree Lilac
Syringa josikaea	Hungarian Lilac
Syringa villosa	Late Lilac
Syringa vulgaris	Common Lilac
Taxus cnandensis	Canada Yew
Taxus cuspidata	Japanese Yew
Thuja occidentalis	American Arborvitae
Thuja occidentalis globosa	American Globe Arborvitae

Thuja occidentalis pyramidalis	American Pyramidal Arborvitae
Tilia americana	American Linden
Tilia platyphyllos	Bigleaf European Linden
Tsuga canadensis	Canada Hemlock
Ulmus americana	American Elm
Ulmus glabra camperdowni	Camperdown Elm
Vaccinium canadense	Canada Blueberry
Vaccinium corymbosum	Highbush Blueberry
Vaccinium macrocarpon	Cranberry
Vaccinium oxycoccus	Small Cranberry
Vaccinium pennsylvanicum	Lowbush Blueberry
Vaccinium vacillans	Dryland Blueberry
Viburnum alnifolium	Hobblebush
Viburnum cassinoides	Withe-rod
Viburnum dentatum	Arrowwood
Viburnum opulus	European Cranberrybush
Viburnum tomentosum	Doublefile Viburnum
Vinca minor	Common Periwinkle
Vitis labrusca	Fox Grape

Planting List for Zone D

Abies balsamea	Balsam Fir
Acanthopanax pentaphyllum	-------
Acer dasycarpum	Silver Maple
Acer ginnala	Amur Maple
Acer negundo	Boxelder
Acer pennsylvanicum	Striped Maple
Acer platanoides	Norway Maple
Acer platanoides schwedleri	Schwedler Maple
Acer rubrum	Red Maple
Acer saccharum	Sugar Maple
Acer saccharinum wieri	Wier Maple
Acer spicatum	Mountain Maple
Actinidia arguta	Bower Actinidia
Aesculus glabra	Ohio Buckeye
Aesculus hippocastanum	Horsechestnut
Alnus incana	Speckled Alder
Alnus mitchelliana	American Green Alder
Amelanchier canadensis	Downy Shadblow
Amelanchier laevis	Allegheny Shadblow
Amelanchier stolonifera	Running Shadblow
Ampelopsis quinquefolia	Virginia Creeper
Andromeda glaucophylla	Downy Bog-rosemary
Aristolochia siphò	Dutchmans-pipe
Artemisia absinthium	Common Wormwood
Azalea calendulacea	Flame Azalea
Azalea viscosa	Swamp Azalea
Berberis thunbergi	Japanese Barberry
Berberis thunbergi atropurpurea	Purpleleaf Japanese Barberry
Berberis vulgaris	European Barberry
Betula lutea	Yellow Birch
Betula papyrifera	Canoe Birch
Betula pendula gracilis	Cutleaf Weeping Birch
Betula populifolia	Gray Birch
Buddleia davidi	Orange-eye Butterflybush
Caragana arborescens	Siberian Pea-tree
Celastrus scandens	American Bittersweet
Cercidiphyllum japonicum	Katsura-tree
Chamaecyparis pisifera	Sawara Retinospora
Chamaecyparis pisifera filifera	Thread Retinospora
Chamaecyparis pisifera filifera aurea	Golden Thread Retinospora
Chamaecyparis pisifera squarrosa	Moss Retinospora
Chamaedaphne calyculata	Leatherleaf
Chimaphila umbellata	Common Pipsissewa
Chiogenes hispidula	Creeping Snowberry
Clematis jackmani	Jackman Clematis
Clematis paniculata	Sweet Autumn Clematis

Cornus alternifolia	Pagoda Dogwood
Cornus stolonifera	Red-osier Dogwood
Corylus rostrata	Beaked Hazelnut
Crataegus oxyacantha	English Hawthorn
Daphne cneorum	Rose Daphne
Deutzia gracilis	Slender Deutzia
Diervilla trifida	Dwarf Bush-honeysuckle
Dirca palustris	Leatherwood
Elaeagnus angustifolia	Russian-olive
Empetrum nigrum	Crowberry
Enonymus alatus	Winged Euonymus
Euonymus radicans	Wintercreeper
Euonymus radicans minimus	Baby Wintercreeper
Euonymus radicans vegetus	Bigleaf Wintercreeper
Fagus americana	American Beech
Fraxinus nigra	Black Ash
Gaultheria procumbens	Wintergreen
Gaylussacia baccata	Black Huckleberry
Gleditsia triacanthos	Common Honeylocust
Hydrangea arborescens grandiflora	Snowhill Hydrangea
Hydrangea paniculata grandiflora	Peegee Hydrangea
Hypericum aureum	Golden St. Johnswort
Ilex verticillata	Common Winterberry
Juglans cinerea	Butternut
Juniperus chinensis pfitzeriana	Pfitzer Juniper
Juniperus sabina	Savin Juniper
Kalmia angustifolia	Lambkill
Kalmia latifolia	Mountain-laurel
Kolkwitzia amabilis	Beautybush
Larix laricina	American Larch
Larix leptolepis	Japanese Larch
Ledum groenlandicum	True Labrador-tea
Ligustrum ibota	Ibota Privet
Ligustrum lodense	Lodense Privet
Ligustrum vulgare	European Privet
Linnaea borealis americana	American Twinflower
Lonicera bella	Belle Honeysuckle
Lonicera canadensis	American Fly Honeysuckle
Lonicera morrowi	Morrow Honeysuckle
Lonicera sempervirens	Trumpet Honeysuckle
Lonicera tatarica	Tatarian Honeysuckle
Malus floribunda	Japanese Flowering Crab
Malus halliana	Hall Crab
Malus ioensis plena	Bechtel Crab
Malus niedzwetzkyana	Redvein Crab
Malus sylvestris	Apple
Mitchella repens	Partridgeberry
Myrica gale	Sweetgale
Nemopanthus mucronatus	Mountain-holly
Philadelphus aureus	Golden Mockorange
Philadelphus coronarius	Sweet Mockorange

Physocarpus opulifolius	Common Ninebark
Physocarpus opulifolius luteus	Goldleaf Ninebark
Picea canadensis	White Spruce
Picea pungens glauca	Blue Colorado Spruce
Picea rubra	Red Spruce
Pinus banksiana	Jack Pine
Pinus montana mughus	Mugho Pine
Pinus resinosa	Red Pine
Pinus strobus	White Pine
Populus alba	White Poplar
Populus balsamifera	Balsam Poplar
Populus eugenei	Carolina Poplar
Populus grandidentata	Largetooth Aspen
Populus nigra italica	Lombardy Poplar
Populus tremuloides	Quaking Aspen
Potentilla fruticosa	Shrubby Cinquefoil
Prunus americana	American Plum
Prunus cerasifera	Myrobalan Plum
Prunus cerasifera pissardi	Purpleleaf Plum
Prunus glandulosa plena	Flowering Almond
Prunus nigra	Canada Plum
Prunus pennsylvanica	Pin Cherry
Prunus pumila	Sand Cherry
Prunus virginiana	Common Chokecherry
Quercus rubra ambigua	Northern Red Oak
Rhamnus cathartica	Common Buckthorn
Rhododendron catawbiense	Catawba Rhododendron
Rhodora canadensis	Rhodora
Rhus typhina	Staghorn Sumac
Ribes odoratum	Golden Currant
Robinia pseudoacacia	Common Locust
Rosa blanda	Meadow Rose
Rosa "F. J. Grootendorst"	-------
Rosa foetida harisoni	Harison's Yellow
Rosa rugosa	Rugosa Rose
Rubus odoratus	Flowering Raspberry
Salix cordata	Heartleaf Willow
Salix discolor	Pussy Willow
Salix humilis	Prairie Willow
Salix pentandra	Laurel Willow
Salix vitellina	Golden Willow
Sambucus canadensis	American Elder
Sambucus canadensis aurea	Golden American Elder
Sambucus pubens	Scarlet Elder
Sorbaria arborea	Tree-spirea
Sorbaria sorbifolia	Ural False-spirea
Sorbus americana	American Mountain-ash
Sprbus quercifolia	Oakleaf Mountain-ash
Spiraea billiardi	Billiard Spirea
Spiraea bumalda	Bumalda Spirea

Spiraea chamaedryfolia	Germander Spirea
Spiraea latifolia	Pink Meadow Spirea
Spiraea tomentosa	Hardhack
Spiraea trichocarpa	Korean Spirea
Spiraea vanhouttei	Vanhoutte Spirea
Symphoricarpos racemosus laevigatus	Garden Snowberry
Syringa chinensis	Chinese Lilac
Syringa japonica	Japanese Tree Lilac
Syringa josikaea	Hungarian Lilac
Syringa villosa	Late Lilac
Syringa vulgaris	Common Lilac
Taxus canadensis	Canada Yew
Taxus cuspidata	Japanese Yew
Taxus cuspidata capitata	-------
Thuja occidentalis	American Arborvitae
Thuja occidentalis globosa	American Globe Arborvitae
Thuja occidentalis pyramidalis	American Pyramidal Arborvitae
Tilia americana	American Linden
Tilia platyphyllos	Bigleaf European Linden
Tsuga canadensis	Canada Hemlock
Ulmus americana	American Elm
Vaccinium canadense	Canada Blueberry
Vaccinium corymbosum	Highbush Blueberry
Vaccinium macrocarpon	Cranberry
Vaccinium oxycoccus	Small Cranberry
Vaccinium pennsylvanicum	Lowbush Blueberry
Viburnum alnifolium	Hobblebush
Viburnum cassinoides	Withe-rod
Viburnum dentatum	Arrowwood
Viburnum opulus	European Cranberrybush
Viburnum tomentosum	Doublefile Viburnum
Vinca minor	Common Periwinkle

SUMMARY

A study has been made of woody plants of ornamental value under actual growing conditions in Maine to determine those which are hardy.

In order to give due consideration to climatic variation within the State, and to delimit areas which could be said to have similar growing conditions, four zones were established by divisional lines which connect points recorded as having 150, 130, and 110 frost-free days, respectively.

Selected stations were visited in the growing season to determine the woody plants which had been established.

A check list is presented in such form as to indicate the zones in which each plant was observed. Herbaria and botanical literature relating to Maine plants were searched, and many useful plants therein found are included in the check list.

For each zone a planting list has been made which includes the woody plants found apparently to be hardy and therefore considered suitable for use in landscape plantings within that area.

Although these lists include a majority of the woody plants suitable for landscape gardening purposes, they are by no means complete; many worthwhile plants which horticultural information suggests should be perfectly adaptable to Maine climate have not yet been given satisfactory trial in the State. Likewise, it is probable that some plants now found only in Zone A would be perfectly hardy

in other zones.

It is hoped that this study may form a basis for further investigation, particularly in the introduction on trial of plants into zones in which they do not now appear.

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